

'A STUDY OF LANGUAGE ALTERNATION IN THE
GHANAIAN PRIMARY SCHOOL CLASSROOM'

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I hereby declare that this thesis was composed by myself and that the work is my own

Abstract

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Alhassan Seidu

Although UNESCO 1953 recommends the use of students’ mother tongue in education during the formative years, educators by no means agree on the extent to which local and international languages should be employed in primary school teaching. In Ghana language in education policy requires the use of L1 medium in the first three years, but prohibits the simultaneous alternating use of the target language (L2) and the learners’ mother tongue (L1) in classrooms. However, classroom practice presents quite a different picture.

A major concern of this study is the examination of the classroom language of twelve primary school teachers with the aim of describing language alternation and its motivations in the classroom discourse of Ghanaian primary school teachers.

Through detail study using audio recordings, the study provides evidence to show that most teachers disregard the policy restrictions and alternate two languages in class. Teachers’ actual classroom language use in the first three years is one of language alternation with a tendency to greater use of English. After the first three years (classes 4-6), where the policy requires the use of English, again the pattern is that of alternation between English and Ghanaian languages with emphasis on English irrespective of the status or locality of the school. A national survey of teachers’ opinion about what language they use in classrooms, also confirms the use of language alternation with emphasis on the use of English at both levels. Interestingly, the alternation shows dual direction. Teachers switch from English into L1 (L2→L1) and from L1 into English (L1→L2).

The present study also provides some evidence that language alternation in Ghanaian primary classrooms may be educationally beneficial. In general terms, for example, it was found that the teachers’ acceptance of pupils’ use of the mother tongue in combination with loan words enabled some of the pupils to participate fully in classroom discussions and learning.

In conclusion, the study recommends that if primary education is to achieve any beneficial results of transferring school knowledge into home and community ones, then it is important that language alternation be recognised as a relevant pedagogic device for teaching and learning in Ghanaian primary schools.

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DEDICATION

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LIST OF ABBREVIATIONS USED IN THE TEXT

Bibliographical References

ADEA	Association for the Development of Education in Africa
AILA	Association Internationale de Linguistique Appliquée
ARAL	Annual Review of Applied Linguistics
IRA	International Review of Education
LPLP	Language Problems and Language Planning
NAEP	National Assessment of Education Progress

Functions of Code-Switching

ACK	Acknowledgement
CON	Content
DIR	Directives
EXP	Explanations
FEP	Formulaic Expressions
MAN	Management
QUE	Questions
RFA	Request for Action
SUB	Substitutions
TRN	Translations

Ghana Education Service Personnel and Institutions

ATGL	Association of Teachers of Ghanaian Languages
CRDD	Curriculum Research and Division of the Ghana Education Service
DDG	Deputy Director General of Ghana Education Service
DDG1	First Deputy Director General of Ghana Education Service
DDG2	Second Deputy Director General of Ghana Education Service
DG	Director General of Ghana Education Service
GES	Ghana Education Service
GESC	Ghana Education Service Council
NFED	Non-Formal Education Division of the Ministry of Education - Ghana

Miscellaneous

AEDP	Accelerated Educational Development Plan
BIAS	Brown Interactional Analysis Category
FIAC	Flander's Interactional Analysis Category
IDA	The International Development Agency
MLF	Matrix Language Frame
Sect.	Section
TTCs	Teacher Training Colleges
VL	Vehicular Languages.

Primary School Subjects

CS	Cultural Studies
Eng.	English
GL	Ghanaian Language
LS	Life Skills
MA	Mathematics
Math's	Mathematics
SC	Science

Qualifications and Examinations

BECE	Basic Education Certificate Examination
Cert. 'A'	Teachers' Certificate 'A'
Cert. 'B'	Teachers' Certificate 'B'
GCE 'O/A'	General Certificate of Education: Ordinary and Advanced Levels

Questionnaire Response Options

A	Agree
AE	Always in English
AL	Always in L1
D	Disagree
ELE	In English and L1 equally
EML	In English more than L1
Freq.	Frequency
L1	Language one/ Mother Tongue
L2	Second Language/ English
MLE	More in L1 than in English
N	Population/ total
NAND	Neither Agree nor Disagree
SA	Strongly Agree
SD	Strongly Disagree

Schools and Grades

JSS	Junior Secondary School
LPS	Lower Primary School
P1	Primary Class One
P2	Primary Class Two
P3	Primary Class Three
P4	Primary Class Four
P5	Primary Class Five
P6	Primary Class Six
SSS	Senior Secondary School
UPS	Upper Primary School

Schools Used in the Study

Abo	Aborɔfo Primary School
Mak	Makaranta Primary School
WaP	Wa Para Primary School
Zon	Zongo Primary School

Teachers in the Study

TA	Teacher A
TB	Teacher B
TC	Teacher C
TD	Teacher D
TE	Teacher E
TF	Teacher F
TG	Teacher G
TH	Teacher H
TI	Teacher I
TJ	Teacher J
TK	Teacher K
TL	Teacher L

Transcription Conventions

Chd.	Child
Chn.	Children
ML	Matrix Language
Tr.	Teacher

APPENDIX 1

SOCIOLINGUISTIC MAP OF GHANA



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GHANAIAIAN LANGUAGES

LIST AND CLASSIFICATION OF INDIGENOUS GHANAIAIAN LANGUAGES

1 GUR

A MOORE-GURMA



a WESTERN

- 1 Frafra
- 2 Wali-Dagaare-Birifor
- 3 Safaliba



b CENTRAL

- 4 Bulli
- 5 Komung
- 6 Nabr
- 7 Talni
- 8 Kusaal
- 9 Dagbanli-Mampruli-Nanuni
- 10 Hanga-Kamara



c EASTERN

- 11 Bimoba
- 12 Konkomba
- 13 Bassari

B GRUSI



a NORTHERN

- 14 Kasem



b SOUTHERN

- 15 Sisaala
- 16 Chakali
- 17 Tampulma
- 18 Vagja
- 19 Mo

C OTHER GUR



a KULANGO

- 20 Nkuraeng



b SENUFO

- 21 Nafaanra



c TEM

- 22 Ntrubo-Chala

2 MANDE



23 Ligbi

24 Bisa

3 KWA

A VOLTA-COMOE



a CENTRAL (TANO)

- 25 Sehwi-Aowin-Nzema-Ahanta
- 26 Akan
- 27 Chakosi



b EASTERN (GUAN)

- 28 Gonja (Gbanyito)
- 29 Achode
- 30 Yeji-Nchumburu-Krachi-Nawuri
- 31 Nkomva
- 32 Cherepong-Lete
- 33 Awutu-Efutu

B GA-DANGME



- 34 Ga
- 35 Dangme (Ada-Shai-Krobo)



C EWE-FON

- 36 Ewe



D CENTRAL VOLTA REGION (TOGO RESTSPRACHEN)

- 37 Adele
- 38 Buem (Lelemi; Lefana)
- 39 Bowiri
- 40 Sekpele (Likpe)
- 41 Siwu (Lolobi-Akpañu)
- 42 Santrokofi
- 43 Logba
- 44 Avatime-Nyangbo-Tafi

- Language boundaries
- - - - - Some dialect boundaries
- National boundaries

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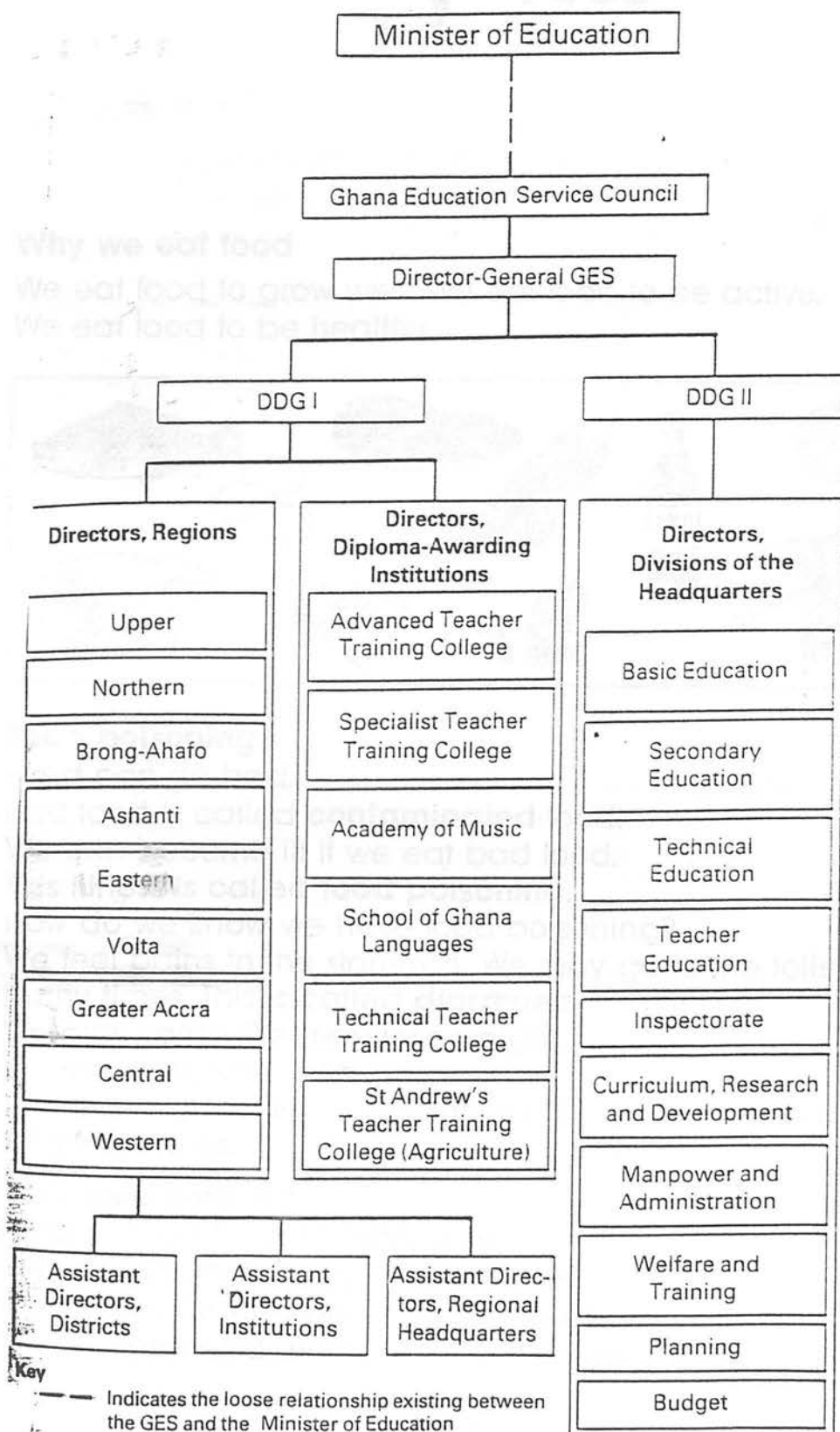
Published by Asempa Publishers, 1980

Jointly compiled and edited by the Language Centre, University of Ghana, and the Institute of Linguistics

Designed by Joshua Adjabeng

APPENDIX 2: THE STRUCTURE OF GHANA EDUCATION SERVICE

The Administration and Control of Education in Ghana



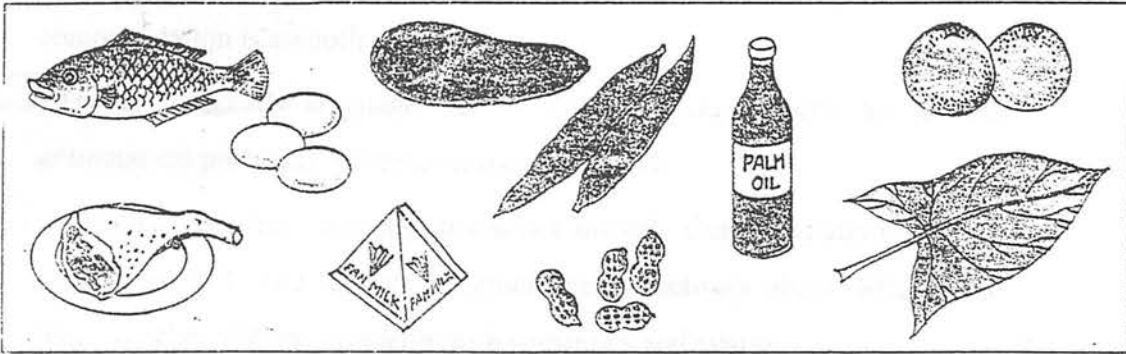
Organisation of the Ghana Education Service (as at January 1981)

Source: J. D. Quarshie, Institute of Educational Planning and Administration, UCC.

5 FOOD

Why we eat food

We eat food to grow well. We eat food to be active.
We eat food to be healthy.



Food poisoning

Food can go bad.

Bad food is called **contaminated** food.

We can become ill if we eat bad food.

This illness is called **food poisoning**.

How do we know we have food poisoning?

We feel pains in the stomach. We may go to the toilet many times. This is called **diarrhoea**.

We may vomit. We may lose weight.

We may become weak.

All these signs of food poisoning may last from one day to a few weeks.

How food goes bad

Food can go bad in many ways.

Some plants can bring about illness.

Some animals can bring about illness.

These plants and animals are called **pests**.

Appendix 4 : Teachers Language Proficiency Evaluation Scale

The teachers competence in English falls under the category:

1. ☐ Excellent: Teacher's language use is smooth, grammatically correct and has no pronunciation difficulties. Teacher communicates effectively. Teacher's language use is precise and accurate
2. ☐ Very good: Teacher's language use is good but hesitates a little. teacher is not as fluent as in 1. Grammatically the language is correct. Teachers communication is smooth
3. ☐ Good: Teacher's language use is fluent although there are a few grammatical problems. Communication is smooth
4. ☐ Average: Teacher's language use is not smooth. Communication is not as smooth as in 3. The teacher communicates effectively about 40% of the time. Teacher still has problems with semantics and syntax
5. ☐ Poor. Teacher's language use is not smooth. Teacher hesitates a lot of the time. Teacher's language is full of errors: grammar, semantics, syntax

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APPENDIX 5 (1) TA :English.

LESSON : ONE
TEACHER : TA
CLASS : THREE
SCHOOL : ABORFO SUKUU.
SUBJECT : ENGLISH LANGUAGE:READING COMPREHENSION
TOPIC : SULE AND ADISA VISIT THEIR UNCLE
DATE : 13TH FEBRUARY, 1996.

- 1 Tr. : Clean the board. Take your reading books. Take your reading books. Turn to page 14. No, eh, unit 12, unit 12. Those who haven't got should join their friends. If you don't have the English book join your friend.
- 2 Chn. : [Talking together].
- 3 Tr. : Bring the key. Now we are going to read the passage. Before we do that I would like us to read through the words. Say the words after me and then after that we shall explain the words. Say it after me. Visited.
- 4 Chn. : Visited.
- 5 Tr. : Visited.
- 6 Chn. : Visited.
- 7 Tr. : Station.
- 8 Chn. : Station.
- 9 Tr. : Driver.
- 10 Chn. : Driver.
- 11 Tr. : Tamale.
- 12 Chn. : Tamale.
- 13 Tr. : Yendi.
- 14 Chn. : Yendi.
- 15 Tr. : Shouted.
- 16 Chn. : Shouted.
- 17 Tr. : Shouted.
- 18 Chn. : Shouted.
- 19 Tr. : In front.
- 20 Chn. : In front.
- 21 Tr. : In front.
- 22 Chn. : In front.
- 23 Tr. : Stopped.
- 24 Chn. : Stopped
- 25 Tr. : Stopped
- 26 Chn. : Stopped
- 27 Tr. : Good. I want us to explain the words that we have just read. Visited.
- 28 Chn. : Visited.
- 29 Tr. : Don't say it after me. Visited. We got this word from the word visit. Ha! I am going to visit my teacher. Hein! I am going to visit my teacher. It means I have not been there but I have made up my mind to go and visit my

- teacher. But when you say visited then you are going to, it means it has past. You have been there already. So you say visited. You understand?
- 30 Chn. : Yes.
- 31 Tr. : In front, In front I want someone to use in front in sentence. Boa, eh, Appiah.
- 32 Appiah: I am sitting in front of you
- 33 Tr. : You are sitting in front of me. Thank you. Any other?
- 34 Appiah : I was sitting in front of you
- 35 Tr. : I was sitting in front of you. The last one! Kusi.
- 36 Kusi : I am, I am sitting in front of the cupboard.
- 37 Tr. : I'm sitting in front of the cupboard. Right. Where Am I? Where am I standing?
- 38 Kusi. : You are
- 39 Tr. : All of you.
- 40 Chn. : You are standing in front of the blackboard.
- 41 Tr. : Again.
- 42 Chn. : You are standing in front of the blackboard.
- 43 Tr. : So you all know what it means by in front. Hein. Then we have the word shouted, shouted, shouted, shouted. Who can explain this word for me? Shouted. Yes.
- 44 Chd. : Speaking louder
- 45 Tr. : Speaking louder. What did you say?
- 46 Chd. : Speaking louder
- 47 Tr. : Speaking louder. Give him a big clap.
- 48 Chn. : [clapping].
- 49 Tr. : Speaking louder Ha! So I want you to say this word loudly. What word did you say?
- 50 Chd. : Blackboard.
- 51 Tr. : Okay say blackboard.
- 52 Chn. : Blackboard.
- 53 Tr. : Thank you. So you shouted. Ha! Is gone and past. So you shouted. Thank you. And then we have another word, driver, driver. Use driver in sentence. Driver. Yes Doris
- 54 Doris.: My father is a driver.
- 55 Tr. : Again.
- 56 Doris : My father is a driver.
- 57 Tr. : My father is a driver. Thank you very much. Who else? Edith
- 58 Edith.: Our driver drives us to school everyday.
- 59 Tr. : Say it louder.
- 60 Doris.: Our driver drives us to school everyday
- 61 Tr. : Yes the driver drives us to school everyday. Thank you very much. Right, now that you've got to know the meanings of the words. I would like us to read the passage. First of all I will read. Ha! While you points at the words. In the book. When I finish reading I will call you one by one for you to read.

SULE AND ADISA VISIT THEIR UNCLE

Unit 12. Sule and Adisa go to school at Yendi. During the Christmas holidays, they visited their uncle in Tamale. Early in the morning, Sule and Adisa said goodbye to their father. Their mother took them to the lorry station. They walked fast. Soon they were at the station. Some drivers, some of the drivers there were shouting Tamale, Tamale, Tamale! We're ready to go. The children and their mother quickly went to the first lorry. The driver was standing in front of the lorry. Their mother said, "Driver, my children are going to Tamale. How much is the fare, please?" The driver said, "Eighty cedis each." The children's mother gave one hundred and sixty cedis to Sule. She said, "This is your fare. Keep it well. When you reach Tamale give it to the driver." Sule and Adisa got on the lorry. Other passengers also got on it. Soon the driver was driving fast. The driver stopped at Zano. Two passengers got off, and one got on the lorry. When they were near Tamale, the driver's mate shouted, "All fares please!" Sule gave the one hundred and sixty cedis to the mate and said, "Here is our fare, please." The mate said, "Thank you." The driver stopped in front of their uncle's house. Sule and Adisa got off the lorry. They took their bag and went into their uncle's house. That is the story. Now I want you to read paragraph by paragraph. Who will read first? Annan read for us. Read the first paragraph.

- 61 Annan.: Unit 12. Sule and Adisa visit their Uncle.. Sule and Adisa go to school at Yendi. During the Christmas holidays, they visited their uncle in Tamale. Early in the morning, Sule and Adisa said goodbye to their father. Their mother took them to the lorry station. They walk fast. Soon they were at
- 62 Tr. : They walked fast. Take your time.
- 63 Annan.: They walked fast. Soon they were at the lorry station
- 64 Tr. : At the station
- 65 Annan.: At
- 66 Tr. : Soon they were at the station.
- 67 Annan.: Soon they were at the station. Some of the drivers there were shouting Tamale, Tamale, Tamale. We're ready to go.
- 68 Tr. : Thank you. Somebody should continue. Somebody should continue. Goka read for us. Continue from where he ended.
- 69 Goka.: The children and their mother quickly went to the first lorry. The driver, the driver was standing in front of the lorry. Their mother said, "Driver, my children are going to Tamale. How much is their fare,
- 70 Tr+Goka: How much
- 71 Goka.: is the fare please?" The driver said, "Eighty cedis each." The children's mother gave one hundred and sixty cedis to Sule. She said, "This is your firm. Keep it well.
- 72 Tr. : This is your fare
- 73 Goka.: This is your form.
- 74 Tr. : Fare
- 75 Goka.: This is your firm
- 76 Tr. : Fare
- 77 Goka.: This is.
- 78 Tr. : Say fare.

- 79 Goka.: Fare
- 80 Tr. : All of you. Fare
- 81 Chn. : Fare
- 82 Tr. : Fare
- 83 Chn. : Fare
- 84 Tr. : Yes.
- 85 Chn. : "This is your fare. Keep it well. When you get to Tamale give it to the driver."
- 86 Tr. : Thank you very much . I want someone to read to continue for us.
Gertrude. Sule and Adisa, Mhum Read from that place
- 87 Gertrude: Sule and Adisa got off the lorry. Other, other passengers got on
- 88 Tr. : Other, other passengers also got on
- 89 Gertrude: Other, other passengers also got on. Soon the driver was driving fast. The driver stopped at Zano. Two passengers got off, and one got on it
- 90 Tr. : And one got on the lorry.
- 91 Gertrude: Got on the
- 92 Tr. : And one got on the lorry, the lorry.
- 93 Gertrude: And one got on the lorry the lorry.
- 94 Tr. : Thank you very much. Yes. Who would read for us? I want some one to continue. Arthur.
- 95 Arthur: When they were near Tamale
- 96 Tr. : Louder.
- 97 Arthur: When they were near Tamale the driver's mate shouted,
- 98 Tr. : The driver's mate
- 99 Arthur: The driver's mate shouted, "All fares please!" Sule gave the mate one hundred.
- 100 Tr. : No. one hundred.
- 101 Arthur: Sule gave the one hundred and sixty cedis to the mate and said, "Here is our fare, please." The mate said, "Thank you."
- 102 Tr. : Thank you. Yes the last paragraph. Catherine.
- 103 Catherine : The driver stopped in front.
- 104 Tr. : Louder
- 105 Catherine : The driver stopped in front of their uncle's house. Sule and Adisa got off the lorry. They took their bags and went into their uncle's house.
- 106 Tr. : Thank you very much. Now we are all going to read the passage.
After that then we answer the questions. Lets turn to page 4 eh unit 12 again.
Ehein and read. Unit 12
- 107 Chn. : Unit 12 Sule and Adisa visit their Uncle.
- Unit 12. Sule and Adisa go to school at Yendi. During the Christmas holidays, they visited their uncle in Tamale. Early in the morning, Sule and Adisa said goodbye to their father. Their mother took them to the lorry station. They walked fast. Soon they were at the station. Some drivers, some of the drivers there were shouting Tamale, Tamale,
- 108 Tr. : Hold on, hold on.
- 109 InT : Then what are you going to do with this ones?

- 110 Tr. : I have asked Miss Hanna Acquah to help. Let's continue. Where did we reach.?
- 111 Chn. : The children. The children and their mother quickly went to the first lorry. The driver was standing in front of the lorry. Their mother said, "Driver, my children are going to Tamale. How much is the fare, please?" The driver said, "Eighty cedis each." The children's mother gave one hundred and sixty cedis to Sule. She said, "This is your fare. Keep it well. When you reach Tamale give it to the driver." Sule and Adisa got on the lorry. Other passengers also got on it. Soon the driver was driving fast. The driver stopped at Zano. Two passengers got off, and one got on the lorry. When they were near Tamale, the driver's mate shouted, "All fares please!" Sule gave the one hundred and sixty cedis to the mate and said, "Here is our fare, please." The mate said, "Thank you." The driver stopped in front of their uncle's house. Sule and Adisa got off the lorry. They took their bag and went into their uncle's house.
- 112 Tr. : Thank you very much. You read very well. Now let's try and answer these questions. Who will read the first question for us? Akosua read for us.
- 113 Akosua: Where did Sule and Adisa go to during the Christmas holidays?
- 114 Tr. : Again.
- 115 Chn. : Where did Sule and Adisa go to during the Christmas holidays
- 116 Tr. : Ahein, who will answer it for us. Where did Sule and Adisa go to during the Christmas holidays? Abigail
- 117 Abigail: Sule and Adisa go to Tamale
- 118 Tr. : Again.
- 119 Abigail: Sule and Adisa visit their uncle in Tamale.
- 120 Tr. : Sule and Adisa visited their uncle in Tamale. Question two, question two, question two. Evelyn
- 121 Evelyn.: Who took them to the lorry station?
- 122 Tr. : Again.
- 123 Chn. : Who took them to the lorry station?
- 124 Tr. : Answer it for us. Who took them to the lorry station? Ismail
- 125 Ismail. : [Inaudible].
- 126 Tr. : Again
- 127 Chn. : Their mother took them to the lorry station.
- 128 Tr. : All of you.
- 129 Chn. : Their mother took them to the lorry station.
- 130 Tr. : Thank you very much. Then we have the third question. I will read that for you. How much was Adisa's fare? William, How much was Adisa's fare?
- 131 William.: Adisa's fare was eighty cedis.
- 132 Tr. : Adisa's fare was eighty cedis. Is it true?
- 133 Chn. : Yes Miss.
- 134 Tr. : Is it true
- 135 Chn. : Yes Miss
- 136 Tr. : Alright. The fourth question Who said, "All fares please." Who said, "All fares please."

- 137 Chn. : The driver mate said. "All fares."
- 138 Tr. : The driver's, say the driver's mate.
- 139 Chn. : The driver's mate said, "All fares please!."
- 140 Tr. : Thank you very much. All of you.
- 141 Chn. : The driver's mate said, "All fares please!."
- 142 Tr. : The last question. Achiaa will read for us. Yes aha.
- 143 Achiaa : Where did the driver stop at Tamale?
- 144 Tr. : Again.
- 145 Chn. : Where did the driver stop at Tamale?
- 146 Tr. : Where did the driver stop at Tamale? Where did the driver stop?
Appiah.
- 146 Appiah: The driver stopped at Zanu.
- 147 Tr. : Again
- 148 Chn. : The driver stopped at Zanu.
- 149 Tr. : The driver stopped at Zanu. Thank you. Now I will want you to take your exercise books and then answer the questions 1 to 5. Answer them. Take your exercise books. Take your exercise books and answer the questions I am copying on the board.
- 150 Chn. : [Talking together]
- 151 Tr. : Take your books does not mean you should talk. Ha?
- 152 Chn. : Yes Miss
- 153 Tr. : Just take your book and then start work. Don't forget to write comprehension. Hein!
- 154 Chn. : Yes Miss
- 155 Tr. : Stephen Darko. Go outside and buy one. Go to the market and buy one Hein? But why did you buy one when you were coming from home? Go. I am giving you five minutes. Ha?
- 156 Chn. : [Talking together].
- 157 Tr. : Ah! won't you write? Where is your book? You don't have book and you are not going to buy one. Go out. Who hasn't got English exercise book? I did say English reading book. Who hasn't got English exercise book? Okay start work. Copy the question before you answer.
- 158 Chn. : [Working]
- 159 Tr. : Why Rapheal won't you write?
- 160 Rapheal.: [Inaudible].
- 161 Tr. : Ha? I can't hear you.
- 162 Rapheal: [Inaudible].
- 163 Tr. : Jeff has borrowed your pen whiles you are using it!
- 164 Chn. : [Inaudible].
- 165 Tr. : He has spoilt it? So you are not going to write? Come for mine. Where is mine?
- 166 Chn. : [Working]
- 167 Tr. : Will Mercy go and sit down? Why can't you sit down for one minute?
- 168 Chn. : [Working].
- 169 Tr. : Did you get the book?
- 170 Chn. : [Inaudible].

- 171 Tr. : You won't come and thank me.
 172 Chn. : [Working].
 173 Tr. : Answer the first one before you go on to the next one.
 174 Chn. : [Working].
 175 Tr. : He! Where is your book?
 176 Chn. : [Working].
 177 Tr. : Won't you write?
 178 Chn. : [Inaudible].
 179 Tr. : Who has got two pens?
 180 Chn. : [Inaudible]
 181 Tr. : Give him one.
 182 Chn. : I have given him.
 183 Tr. : Don't forget to write comprehension. Hein!
 184 Chn. : [Working].
 185 Tr. : He! Tofique write boldly, write boldly. Your handwriting is too small I can't read.
 186 Chn. : [Working].
 187 Tr. : Those who have finished should go and put their books on the table
 188 Chn. : [Working].
 189 Tr. : Who didn't come to school?
 190 Chn. : Solomon.
 191 Tr. : Who didn't come to school?
 192 Chn. : Joseph Dankwa, Kojo Agyekum, [Talking together]
 193 Tr. : It's okay. How many boys?
 194 Chn. : Four boys.
 195 Tr. : Okay, it's okay. Sit down.
 196 Chn. : [Talking together].

APPENDIX 5 (2) TA Science

LESSON : TWO
TEACHER: TA
CLASS : THREE
SCHOOL : ABORFO SUKUU
SUBJECT: ELEMENTARY SCIENCE
TOPIC : POISONOUS FOOD
DATE : 7TH FEBRUARY, 1996.

- 1 Tr. : Right, we have science and I would like us to remind ourselves of the topics that we treated before we move on to this, the topic for this week. Aha, who can remind us of the topic? Our last topic. Aboagye.
- 2 Aboagye: We treated air pressure.
- 3 Tr. : That has gone and passed. This, the previous one. Yes
- 4 Chd.: We treated food poisoning
- 5 Tr. : Again
- 6 Chd.: We treated food poisoning
- 7 Tr. : Yes. All of you.
- 8 Chn.: We treated food poison.
- 9 Tr. : Right. Food poisoning. Right our topic this week is (turns and writes on the board) Who will read it for us? Somebody should read it for us. Yes
- 10 Chd.: Poisonous food.
- 11 Tr. : Again
- 12 Chd.: Poisonous food
- 13 Tr. : All of you.
- 14 Chn.: Poisonous food!
- 15 Tr. : Again
- 16 Chn.: Poisonous food!
- 17 Tr. : Right, what do we mean by poisonous food? What do we mean by poisonous food? Yes Harry.
- 18 Harry.: The food is not good for you to eat.
- 19 Tr. : The food that is not good for you to eat. Any other? Who else? Who else? Yes.
- 20 Chd.: The food that is poisoned.
- 21 Tr. : The food that is poisoned. We call it poisonous food. Yes.
- 22 Chd.: The food that the date has passed.
- 23 Tr. : The food that the date has passed. That means the food which eh, expiring date is gone. You don't have to do what? To eat it. Yes. Is that all? Mhum.
- 24 Chn.: The food that it has kept for a long time.
- 25 Tr. : The food we've kept for a long time. Good. Now we are going to see how food becomes poisonous or some of the food that are poison. Lets turn our books to page 42, page 42, page 42, page 42, page 42. Right. We have poisonous food.
- 26 Chn.: [Talking together]

- 27 Tr. : When I asked what poisonous food means somebody said, " Food that we've kept for a long time." is a poisonous food. That is good. Somebody also said, "Food that is not good to be eaten." Why is it that the food is not good to be eaten? We are going to learn about that. Now, first of all lets look at these ones. There are some food that can kill us. You see when we were talking about eh, poisonous food we got to know that, when we were talking about, sorry eh, food poisoning, we got to know that when we eat some food you become sick or ill but this time when we say poisonous food, when you eat a poisonous food you will die. It will kill you. You are not going to get ill or get sick. You will rather do what? Die. Then we are going to look at these thing. First of all lets look at the picture on page 42. You can see a plant there. What plant is that? What plant is that? What plant is that? Yes Rapheal. What plant is that?
- 28 Rapheal : Cassava
- 29 Tr. : It's a cassava plant. And does it look like a real cassava? Does it look like a cassava plant? Does it look like a cassava plant?
- 30 Chd.: No.
- 31 Tr. : Why? You said, " No." Why? Look at the picture well Oh! Why? Yes
- 32 Chd.: Because it's poisoning.
- 33 Tr. : Ah! How do you know is poisoning? Me I can see it as Cassava plant. But there are some features that doesn't resemble eh, cassava. Mhum.
- 34 Chd.: It grows like tree.
- 35 Tr. : This one has grown like a tree. Give him a very big clap.
- 36 Chn.: [Clapping]
- 37 Tr. : You see this plant is a cassava plant but it seems like what? A tree. So you see. It's not good to be eaten. When you look at it. And the other picture, on your right. What can you say about that picture? What do you see there? What do you see? Ama. What do you see? What do you see?
- 38 Ama.: A snake.
- 39 Tr. : Snake? Thank you. What other thing can you see?
- 40 Chd.: Some mushrooms.
- 41 Tr. : Yes some mushrooms. Lets talk about the mushrooms first. What can you see about it? Or what can you say about this mushrooms? Now before then. What is the colour of a mushroom? What is the real colour of a mushroom? Yes.
- 42 Chd.: The colour of the real, the mushroom is white
- 43 Tr. : White. A normal mushroom has got a what? A white colour. Mum! It has got a white what?
- 44 Tr+Chn.: Colour.
- 45 Tr. : When you look at the picture you can see so many colours. Who can tell me one? What colour can you see? Gertrude.
- 46 Gertrude: Blue colour.
- 47 Tr. : I can see blue mushroom. What other colour? Senkyire.
- 48 Senkyire: Red colour
- 49 Tr. : You can see a red mushroom. Is that all? Yes.
- 50 Chd.: Light mushroom.

- 51 Tr. : Light mushroom. What colour is it? Light mushroom? No. Baah
- 52 Baah.: Violet.
- 53 Tr. : Violet. Thank you. So you see we have so many colours for this particular mushroom but a real mushroom must have what colour?
- 54 Tr+Chn.: White.
- 55 Tr. : But this one we have red. We have a violet or moo then we have blue colour. You see. so it's. What can you say about it again? Yes.
- 56 Chn.: It is poisonous.
- 57 Tr. : It's poisonous. You see it doesn't look like a mushroom that we have to eat.. It's poisonous because it hasn't got the real colour of a what?
- 58 Tr+Chn.: A mushroom
- 59 Tr. : Thank you. And then lets talk about the third picture. What can you see there? What can you see? What can you see? Yes.
- 60 Chn.: A snake.
- 61 Tr. : A snake. Snake is meat Is it true?
- 62 Chn.: No Miss
- 63 Tr. : Why no? Isn't it a meat? It's meat. Aha! Mum! What can you tell. Eh what can you say about the snake? What can you say about the snake? Aboagye. What can you say about the snake?
- 64 Aboagye: Poison is in the mouth. Poison is in the mouth.
- 65 Tr. : Poison is in the mouth of the snake. Thank you. When you look at it you can see it. You see so it means that the snake is poisonous, even though some pupil eat snake. this particular snake is poisonous because it has got plenty poison in it. look at the mouth. That thing coming from the mouth is poison. So if you eat this particular eh, snake you will die but there are some snakes some people eat. That one is not poisonous. You see. Right and then, so this eh, on this page you've got to know three things. You can see a cassava but the cassava is not a real cassava. Simply because it has grown, it hasn't got the normal size so a real cassava and two, and two, and two. It has grown like a tree. a cassava plant is a bit tiny. You see but this one is big. So it doesn't look like a cassava. So it's poisonous and then the mushrooms too. A real mushroom colour is white and this one has got so many colours. If you eat such mushroom, you will die. It is going to kill you. You see. You are welcome. Then let's move to page 43. What can you say about that picture? Tell me anything that you see in the picture. What can you see? What can you see? Yes.
- 66 Chd.: I can see a fish.
- 67 Tr. : I can see a fish. Where is the fish? A fish is flying? Is the fish flying?
- 68 Chn.: No Miss
- 69 Tr. : ehein, where can you see it?
- 70 Chd.: The fish is in the water.
- 71 Tr. : It is in the water. Mhum. Is that all ? Is that all you can see in the picture? What other things can you see? Yes
- 72 Chd.: I see a woman
- 73 Tr. : I see a woman. Yes There is a woman in the picture. What other thing? Yes.

74 Chd.: I can see a man.
 75 Tr. : What is the man doing?
 76 Chd.: Putting a poisonous in the water.
 77 Tr. : He is putting something. He is pouring something in the water.
 Aha, what can you see?
 78 Chd.: The fish has come out from the water.
 79 Tr. : The fish has come out from the water. Why? Why? we shall talk
 about that later. I can also see some gallons beside the man. You see. What
 have they written on the gallon? What have they written? Marian. What have
 they written?
 80 Marian. : [Inaudible].
 81 Tr. : Louder.
 82 Marian.: DDT
 83 Tr. : They have written DDT. Is that all?
 84 Marian: No Miss
 85 Tr. : Yes.
 86 Chn.: DDT poison.
 87 Tr. : Again
 88 Chd.: DDT poison
 89 Tr. : DDT poison. You see. So what do you think the man is doing?
 What do you think the man is doing. eh! Godwin
 90 Chn.: He is killing the, the, the fish.
 91 Tr. : He is killing the fish with what? His hands!
 92 Chn.: With DDT.
 93 Tr. : Thank you very much. Now when you look at the picture very
 well you can see that (1) the man is pouring some DDT into the water. (2)
 The fish has come out. They are floating in the water. And then (3) There are
 some poisonous eh, there are some poisonous eh, chemicals besides the man.
 This means the man is using that poisonous chemicals to do what? To kill the
 fish. Aha! Is like, there are some mouse, lets say you have got some mouse in
 your room. You want to kill it. If you kill the mouse with a poisonous
 chemical. The mouse eat it and it would die. If another animal eat the, eat the,
 the mouse. What's going to happen? Yes You.
 94 Chd.: The animal too will die
 95 Tr. : Yes Again
 96 Chd.: The animal too will die.
 97 Tr. : The animal too will die because it has eaten what?
 98 Chd. : A poisonous food.
 99 Tr. : Yes It has eaten poisonous food. So this particular fish in the
 river. The man kill, used poisonous chemicals to kill the fish. So if you or me,
 me. If I eat it. I eat the poisonous fish. I am going to do what?
 100 Tr+Chn.: Die
 101 Tr. : I will die. Why? Why should I die. But fish you have to eat fish. If
 I eat the fish why should I die? Ha? Why should I die? Yes.
 102 Chn.: Because the man put the DDT in the river.
 103 Tr. : In the river for the fish to die. So the fish there. I can say there are
 some poisonous chemicals inside the fish in the what?

- 104 Chn.: Water
- 105 Tr. : Water and so if I eat such fish I'm going to do what?
- 106 Chn.: Die.
- 107 Tr. : Because the fish is what?
- 108 Chn.: Poison/ poisonous
- 109 Tr. : Ha?
- 110 Chn.: Poison.
- 111 Tr. : Is poisonous. This time you have to say is poisonous. Ha? You've got to know four things. Fish killed by DDT or poisonous chemicals, if you eat it. You can die. You die **ɛnye sɛ** you can die. To die. And then poisonous snake. Some people eat snake. If you eat this particular snake. The black one. It's very poisonous. If you eat it you are going to die. It will kill you. and then mushrooms with different colours. Ha? Every mushroom or every good mushroom normal mushroom have a white colour. If it hasn't got the white colour and you eat it, you die because it is poisonous. And this eh, cassava. Look at the shape. It's not a normal cassava. If you eat it,. The normal cassava that we eat. If you eat it you are going to die. Right. So what can you tell me about this? The person taking DDT. Drinking DDT. What will happen to that person? We use DDT to kill fish. I ate the fish I die. And if someone use eh drink it raw like that what is going to happen? What's going to happen? Amissah.
- 112 Amissah: He will die. He will die.
- 113 Tr. : The person will die. So Make sure you don't drink DDT. Okay if you drink DDT you will do what?
- 114 Chn.: You will die
- 115 Tr. : You will die because it is poisonous. There are some other chemicals that are poisonous. Who can tell me one? Who can tell me a poisonous eh, chemical? Yes.
- 116 Chd.: Robb
- 117 Tr. : Robb is not a chemical my dear girl. Chemical, when we say chemical, something like the DDT. Ha! Aha liquids. **ɛhein?**
- 118 Chd.: At times they could use medicine.
- 119 Tr. : What medicine? That's what I want. What other medicine or chemicals do you think if I take I would die? That's my question. Yes.
- 210 Chd.: Kerosene
- 121 Tr. : Kerosene Give him a big clap
- 122 Chn.: [Clapping]
- 123 Tr. : If you think if you take eh you take med, eh, kerosene you won't die. **Wo kɔ fie a try hwɛ. Sɛ nka wobɛ hunu wo maame bio a.** Don't do that. Never do that kerosene is very poisonous. It's also poisonous. **Wo fa na wo num gulun, gulun gulun gulun. Wo num wei a ɛfam birim. Wo na wa awuo no. Wa ni bɛtɛ na ɛkyerɛ sɛ wa yɛ dɛn? Wa awu koraa. Aha?** What other chemical when you drink you die. Can kill you easily? Yes
- 124 Chd.: Dynamite
- 125 Tr. : Dynamite. Aha! Is in the book.
- 126 Chn.: Petrol

- 127 Tr. : Petrol. Ha! Petrol. Petrol too is very poisonous. You see if you drink petrol you will die. Aha!
- 128 Chn.: Spirit
- 129 Tr. : Spirit. What kind of spirit is that? Mentholated spirit? Yes. It's very dangerous. Yes that one too. Mhum!
- 130 Chn.: Gas.
- 131 Tr. : Gas. Okay, thank you. Aboagye what else?
- 132 Aboagye :Parasol
- 133 Tr. : Again.
- 134 Aboagye: Parasol
- 135 Tr. : Parasol. Do you know what parasol is?
- 136 Chn.: Yes Miss
- 137 Tr. : Yes. The one we use to wash white clothes. Ha! If you've stain in your dress and you want to wash to clear the stain. You use parasol to do what? To wash it. It's a chemical. So if you drink such a chemical you will die. It's going to destroy your intestines and you actually do what? Is that all? ehein! The last one. Kwarteng.
- 138 Kwarteng: [Inaudible]
- 139 Tr. : Again.
- 140 Kwarteng :Iodine
- 141 Tr. : Iodine. It's also poison. Thank you. Now we've got to know so many chemicals that if we eat we die. What about food? Food, food, food **aduane paa ye die. Aduane bi wɔ hɔ a wodi a wobɛ wuo. Wobɛ wuo wɔ hɔ a. ɛbi ne sɛn?** Yes Appiah.
- 142 Apia.: The food that animals [Inaudible].
- 143 Tr.: Okay, okay. The food food that animals have eaten if you eat it you will die. Right. That one is not poisonous food. **Wahunu?** But **sɛ yɛka poisonous** food **a, ɛno deɛ aduane no ankasa ye** poison. **Aduane bi nso wɔhɔ a sɛɛ na aseɛ. Wodi a wo yɛm bɛ ye wo ya. Wobɛ yare.** But **ɛbiso wɔ hɔ wodi a, ɛndɛɛ wobɛ wuo koraa. Sɛdeɛ ye ka ye DDT wodi a wobɛ wuo.** You will die instantly. **Mum! Wobɛ wuo wɔ hɔ a. Na ɛkyerɛ sɛ aduane bi saa na me pɛ.** We have some leaves. It looks like kontomire.
- 144 Chd.: Yes
- 145 Tr. : Have you seen that?
- 146 Chn.: Yes Miss.
- 147 Tr. : Have you seen that?
- 148 Chn.: Yes Miss.
- 149 Tr. : It looks like **kontomire** but it is not **kontomire**. If you eat it you will die. So you must so you must take very good care of yourselves. You must be very careful. There are some people when they are walking a, they will plug some leaves and put it inside their mouths. It is not good. Who
- 150 Chn.: [Talking together]
- 151 Tr. : This leave
- 152 Chn.: Yes . [Talking together]
- 153 Tr. : Now if you don't stop, that's why you are sick oh! You don't know. That's why you are sick. If you eat by heart, anyhow, you die. You see anything you want to eat it. If you see anything you want to eat it, you will

die. There are some leaves that are very poisonous. Some food, **aduanee paa yedie bi wɔhɔ a eyee poison. Ha! Ha! Nti mo nhwe mo ho yiye.** You must take care. **Mo nhwe mo ho yiye. Bi wɔhɔ a wa hunu se adee bi wɔ fanta tua mu, ha! Wa hunu se nsuo bi wɔ fanta tua mu. ese fanta wo kɔ fa ye a wokɔ num. Bia na eyee petrol.** The colour is a bit similar. Hum! **ese kakra. Nti wo anhwɛ yiye na wo kɔfa pɛ. Wo num a wo be wuo.** Do you understand?

- 154 Chn.: Yes Miss
- 155 Tr. : Mhum. What have you learnt from this lesson? **eden na wa sua afiri adee a ya sua yi so?** Mercy
- 156 Mercy: We should not eat anything that it is showed that one it is poison
- 157 Tr. : ehein, say it louder.
- 158 Mercy.: We should not take anything that show like poison
- 159 Tr. : We should not eat anything that resembles poison. how would you know it's poisonous? Wobe ye den na wahunu se eyee poison? How would you know? Yes. Aha.
- 160 Chd.: You will smell it.
- 161 Tr. : Yes. You can see it by smelling it. Ah! Like this particular mushroom. Ha? When you smell it you know that **wei dee ne scent no ensee ayi emiree o! Na wo agyae. Ha! Wo hwe na scent no eti se miree pe na wo agyae. Aha!**
- 216 Chn.: [Inaudible].
- 163 Tr. : Say it louder.
- 164 Chn.: We should not eat food that has keep long
- 165 Tr. : We should not eat food that has kept long. Example? Example? Give us example. Yes.
- 166 Chn.: Sardine.
- 167 Tr. : Sardine that has been kept long. Aha. Can I help you?
- 168 Int. : [Inaudible].
- 169 InT.: Mrs Asamoah said what?
- 170 Int. : I should tell you to bring the thing.
- 171 InT.: Okay tell her I will bring it. I will finish very soon. Ah! Richard
- 172 Chn.: Milk
- 173 Tr. : Milk hein! Your mother can keep milk Ah! For two years.
- 174 Chn.: [Talking together]
- 175 Tr. : Is it not true?
- 176 Chn. : It is
- 177 Tr. : Yes. You buy. You buy, you buy sardine, you buy milk, you buy peak milk and then put it in the sideboard for show. Yes so that the room will look nice. When even you are hungry mummy won't give it to you. You like to be there a, one day. **enne dee me ni sika ma me nkɔ fa sardine yi na yen twa so na yen di.** You go and open the sardine and then you see that the sardine is smelling all over the place. Because mummy hasn't got money to buy another one. **Ma me nye no saa ma yen di. Wodi pe wo be wuo. eyee poisonous.** Although is food because it has been kept long it becomes what?
- 178 Chd.: Poisonous

- 179 Tr. : It has become what?
- 180 Chn.: Poison
- 181 Tr. : Poisonous. You shouldn't eat tin food that has been kept long. Aha the last one then you go. [Inaudible]. Yes you.
- 182 Chn.: Geisha
- 183 Tr. : Geisha is also one. Thank you very much. Right. Any questions. Any questions. You want to ask question?
- 184 Chd.: Yes
- 185 Tr. : Ask. Ask your question.
- 186 Chn.: Please teacher how would you know that the fish is poisoned?
- 187 Tr. : ehein. She says how would you know that the fish is poisonous. Who would answer her for me? Who would answer the question for me? Yes.
- 188 Chn.: Because they are floating.
- 189 Tr. : Because they are floating how? You didn't see it. It is in the market and you went to buy. You wouldn't know. So what we have to do is that, what we have to do is that whenever you see somebody using this chemical, ha! To kill eh, fish you have to report that person to the police. **Ha! Wo hunu saa ma yen kye no. Wote ase? Ha?** Sometimes **eye a na aduane koraa akuafuo**, farmers when they want to spray their food. **Obi wɔhɔ a wo nim ye. Nti na wɔde aduro no beberee, na wɔde akɔ spray aduane no. Se aduro bia, eno na aborɔfo ka se** too much of every thing is what? Too much of every thing is what?
- 190 Chn.: Bad.
- 191 Tr. : Bad. So if we use too much fertiliser or anything.
- 192 Chn.: [Talking together].
- 193 Tr. : Ah! Because you are hungry you are chewing polluting bag?
- 194 Chn.: [laughing].
- 195 Tr. : If you use plenty chemical on, to spray your crops. It will affect the plant and if somebody eats it he will die. I hope you understand.
- 196 Chn.: Yes Miss.
- 197 Chd.: Please what do they use to do the poison?
- 198 Tr. : What do they use to do poison? They use. Who can tell me? They use different chemicals. Yes
- 199 Chn.: [Inaudible]
- 200 Tr. : What did you say?
- 201 Chn.: I said that the fishermen don't know that people has come and put DDT into the river but they would use the net to catch all the fish
- 202 Tr. : Now the moment you pour DDT in the water the fish will die because is poisonous. DDT is very poisonous. **eye poison paa se se wode sɔ nsuo no mu ko. Na kakra bi okraa kɔ aboa no anum a wɔ be wuo. Nti fisherman or whoever he is no wɔba, wɔ hunu se wɔ te ani pe. He know somebody has done.** Somebody has come to put poison in the river. Okay! So he would know. **Nti saa**, If such a person sees it. He shouldn't bring the fish to market for us to buy at all. You understand?
- 203 Chd. : Yes Madam
- 204 Tr. : You understand?
- 205 Chn. : Yes Miss

- 206 Tr. : The last question
- 207 Chn. : If he put the poison in the water would the poison affect the water?
- 208 Tr. : Yes. That's a very good question. He said, if you put the poison in the water will it affect the water? Won't it affect it? Ha! It will affect the water. And anybody who drinks such water too will also die. The same like the fish. **Ha!** I said the last question. Mum hum.
- 209 Chn. : Please teacher if you put the poison in the water and you go and fetch it and boil, borrow
- 210 Tr. : Boil
- 211 Chn. : Boil it will you die?
- 212 Tr. : Now lets listen to this. The guy is asking a question. He says if somebody has pour, poured DDT in the water. You don't know. Then you fetch it. Then you boil it. And then you drink it. Would you die? And I would say why why you know there's. If you know there is DDT in it don't fetch it at all. Mum! Don't fetch it at all and boil it. Ha! Aha! Don't drink it at all. You understand?
- 213 Chd.: Yes Miss
- 214 Tr. : Yes. Go and fetch another one. You would see that there is DDT in the water. So if you see it don't. Don't do what?
- 215 Chn.: And fetch it.
- 216 Tr. : Right. Lets try and answer these questions. Give them their science exercise books. I didn't say textbooks. I said science exercise books
- 217 Chn.: [Talking together].

APPENDIX 5(3):Ghanaian language

LESSON : THREE
TEACHER : TA
CLASS : THREE
SCHOOL : ABORFO SUKUU
SUBJECT : GHANAIAN LANGUAGE.
TOPIC : ME NANA BARIMA HO ASɛM (MY GRANDFATHER)
DATE : 7TH FEBRUARY, 1996.

- 1 Tr. : Me pɛ sɛ yɛ twɛrɛ asɛm bi ɛfa yɛ nana barima ho. Sɛdɛɛ me dikan ka yɛ no wo nana barima wɔ ne hwan? Yɛ kasɛ wo nana barimaa wɔ ne hwan? Ama K.
- 2 Ama K. : Me nana barima din de
- 3 Tr. : Ka no den
- 4 Ama K. : Me nana barima din de Francis Achampong
- 5 Tr. : Wɔse ne nana barima din de Francis Achampong. ɛyɛ. Na nso me bisa sɛ wo nana barima wɔ ne hwan? Yɛ kasɛ obi yɛ me nana barima, na ɛkyɛrɛ sɛ wɔ yɛ wo dɛn? Wɔ yɛ wo dɛn? Felicia Frimpong
- 6 Felicia F : Wɔ yɛ me nana.
- 7 Tr. : ɛyɛ dɛn na wɔbɛ yɛ wo nana. ɛyɛ dɛn na wɔ bɛ yɛ wo nana? Abrafi.
- 8 Abrafi. : ɛfiri sɛ wɔ yɛ me maame papa.
- 9 Tr. : Mmo wɔ yɛ wo maame papa. Nti yɛ ka nana barima a wɔ yɛ wo maame papa. Wɔ no nkoa? Anaa sɛ. Wo maame papa anaa sɛn? Judith.
- 10 Judith. : Wɔ yɛ me papa papa.
- 11 Tr. : ɛbio
- 12 Judith. : Wɔ yɛ me papa papa.
- 13 Tr. : Wo papa papa nso yɛ wo nana dɛn?
- 14 Chn. : Nana barima.
- 15 Tr. : Mmo. ɛno nti ɛnnɛ yɛ pɛ sɛ yɛ ka, yɛ twɛrɛ yɛ nana barima ho asɛm. ɛnnɔra me ma mo kɔ fie kɔ yɛ **homework**. Me de ma mo kɔ fie sɛ obia nkɔ bisa na wɔn bɛ ka ne ho asɛm nkyɛrɛ me. Nea ɛdikan me pɛ sɛ me bisa wo sɛ. Wo nana barima yɛ frɛ no sɛn? Wo nana barima yɛ frɛ no sɛn? Juliet F.
- 16 Juliet F. : Me nana barima din de Kwame Boateng
- 17 Tr. : ɛbio
- 18 Juliet F. : Me nana barima din de Kwame Boateng
- 19 Tr. : Wɔse ne nana barima din de sɛn?
- 20 Chn. : Kwame Boateng.
- 21 Tr. : Me nana barima, me nana barima din de. Obia nko ne ne nana barima. Me boa anaa? ɛnnɔ nti fa wo nana barima ɛdin ɛhyɛ hɔ. Wo nana barima no wo hwɛ a wa di nfie bɛyɛ sɛn? Wa di nfie sɛn? Me nana, wo nana barima wa di nfie sɛn? Ofori A
- 22 Ofori A. : Me nana barima ade mfie aduasa.

- 23 Tr. : Ne yirafi. ekyere se wa anye ne **home work**. Aha wa di nfie sen?
Boakye A wa di nfie sen?
- 24 Boakye A: Me nana barima ade nfie aduanan nan.
- 25 Tr. : Wɔse wa di nfie aduanan sen?
- 26 Chn. : enan
- 27 Tr. : Aduanan nan ye de kɔ Borɔfo a ye be ka no sen? Aduanan nan
ne borɔfo ye ka no sen? Gregory.
- 28 Gregory.: **Ninety nine**
- 29 Tr. : **Ninety nine?** Dabi. Anita
- 30 Chn. : **Forty four.**
- 31 Tr. : Mmo mo mmɔ mo nsam ma no
- 32 Chn. : Nsambɔ.
- 33 Tr. : Wa di nfie aduanan nan. Mmo wa ye adeɛ. Nti wope se wo twere
a wo be ka no sen? Sen na wo be twere no? Wobe twere no sen? Gifty K.
- 34 Gifty K : Wadi nfie aduasa. Wadi nfie aduasa.
- 35 Tr. : Ka bio ma yentea
- 36 Gifty K. : Wadi nfie aduasa!
- 37 Tr. : Wadi nfie aduasa. Nti wo twere ne din wei a, afei wo se Wadi
nfie aduasa. Mede, ma se ketɛ wɔ ha. Se wahunu? Wo duru hɔ a na wa atwere
asem a ɛse wo twere ahyɛ hɔ. Wo nana barima adi mfie aduasa. Mmo wa aye
adeɛ. He na wɔ tee? Wɔ te he? Wo nana barima no wɔ te he? Veronica.
- 38 Veronica: Me nana barima te Adum.
- 39 Tr. : Ka no den
- 40 Veronica: Me nana barima te Adum!
- 41 Tr. : Wɔte Adum. Wɔte Adum. Ne kurom ne he? Wɔfiri he. Wo nana
barima no wɔ firi he? Ne kurom ne he? Ne kurom ne he? Asamoah
- 42 Asamoah: Ne kurom ne. Ne kurom ne ɔda.
- 43 Tr. : Ne kurom ne ɔda. Anaa se wobe tumi aka no sen? Wo mpe se
wo ka se ne kurom ne Ada wobe ka sen? Yes Gyetua.
- 44 Chn. : Ne kurom ne Tepa.
- 45 Tr. : Anaa se wobe sane aka no sen bio? Me pe se wo dane no kakra.
Sakina
- 46 Sakina. : Anaa se wɔ firi Yendi.
- 47 Tr. : ɔfiri Yendi. Wobe tumi aka se ne kurom ne Yendi anaa se ɔfiri
Yendi. Wo nana no wɔte sen? Wɔ ye tenten anaa se wɔ ye teatea? Wɔye
kɔkɔ anaa se wɔye tumtum? Anaa wɔ ye fitaa! Wo nana no wɔte sen? Wo
nana no wɔte sen? R Amoah. ɔye
- 48 R Amoah: ɔye tenten tumtum.
- 49 Tr. : ɔse ne nana no wɔ ye nipa tenten tumtum. Wa ye adeɛ. Mmo.
ɔye tenten tumtum. Mmo wa ye adeɛ. Na woso wo nana wɔte sen?
- 50 Chd. : Wɔ ye nipa kɔkɔ tenten.
- 51 Tr. : Ka no den.
- 52 Chd : Wɔ ye nipa kɔkɔ tenten.
- 53 Tr. : Wɔ ye nipa kɔkɔ tenten .Nti ye be twere se wɔ ye tenten
tumtum anaa se teatea kɔkɔ anaa se teatea tumtum. Se wahunu. Mmo waye

- adee. Ya hunu dee ye nana no se dee wɔse tee awei yi. Wo nana no wɔ wɔ mma sen? Ne mma ye sen? Wo nana barima no ne mma ye sen? Ne mma ye sen? Ne mma eye sen? Ne mma eye sen? Sandra.
- 54 Sandra. : Ne mma ye
- 55 Tr. : Sandra se nyirafi ne nana mma o! Ne mma ye sen? Godwin
- 56 Godwin : Ne mma ye nsia.
- 57 Tr. : Mmo. Wɔ se ne mma ye nsia. Juliana woso wo nana barima ne mma ye sen?
- 58 Juliana : Ne mma ye du.
- 59 Tr. : Ne mma ye du. Mmo. Woso wo nana barima ne mma ye sen? Prince. Wo nana barima ne mma ye sen?
- 60 Prince. : Me nana barima ne mma eye nson.
- 61 Tr. : Ka ebio.
- 62 Prince. : Me nana barima ne mma eye nson.
- 63 Tr. : Me nana barima ne mma eye nson. Nti ye be twere se. Yɛbe twere sen? Ne mma, ne mma ye wo na wo nim wo na wonim wo nana barima ne mma dudoɔ. Afei ne mma ye, ya hunu ne mma aweie yi. Ne nana no mo ye sen? Ne nana nom nso, ne nana nom nso ye. Ne nana nom ye sen? Baah. Ne nana nom ye sen?
- 64 Baah. : Ne nana nom ye du baako.
- 65 Tr. : Ne nana nom ye du baako. Alfred woso wo nana barima, ne nana nom ye sen?
- 66 Alfred. : Nnan
- 67 Tr. : Ka no den
- 68 Chn. : Nnan
- 69 Tr. : Nnan. Wɔse ne nana nom ye enan. Woso wo nana barima mma ye sen?
- 70 Chn. : Me nana barima mma
- 71 Tr. : Ne nana nom.
- 72 Chn. : Me nana barima nana nom eye du mmeinu
- 73 Tr. : Du mmeinu. Me nana barima nana nom eye du mmeinu Mmo. Wɔye den aduma? Aduma ben na wo nana barima no wɔ ye? eden aduma na wɔye? Senkyire Wɔ ye den aduma?
- 74 Senkyire : ɔye **tyres** aduma
- 75 Tr. : ɔɔn **tyre** me boa? Woso wo nana barima no ye den aduma? Michelle.
- 76 Michelle : ɔye painter aduma
- 77 Tr. : ɔye, ɔ**painte** dan ho. Anaa se ɔka dan ho. Mmo. Woso wo nana barima no ye den aduma? K Asare
- 78 K Asare : Wɔyɔ **farm**, ɔye nwiram aduma.
- 79 Tr. : Wɔye nwiram aduma. Wope akyerɛ se wɔ ye kua ni me boa? Wɔye okua ni. Mmo. Nti wo be twere no sen? Wɔye okua ni anaa se **Dokita** anaa se **lawyer** anaa se wɔye aduma wɔ sika kurabia. Ye ka sika kurabia se wo nim?
- 80 Chn. : **Yes Miss**
- 81 Tr. : ekyere sen?

- 82 Chn. : **Bank**
- 83 Tr. : Sika kurabia kyere se **bank**. Nti bebia wɔ ye aduma eden? Twere hye hɔ. eden aduane paa na wo nana barima wɔpe? Aduane ben paa na wɔ pe? Wo nana barima, aduane ben na wɔ pe? Dora Agyei.
- 84 Dora Agyei: Aduane paa me nana barima pe ne fufuo ne abe nkwaɛ.
- 85 Tr. : Wɔse aduane ne nana barima pe paa ne fufuo ne abe nkwaɛ. Michael woso aduane ben na wo nana barima pe paa?
- 86 Michael : Aduane a wɔpe paa ne banku.
- 87 Tr. : Banku nkoa? Hwee nkaho?
- 88 Michael : Banku ne nkate nkwan.
- 89 Tr. : Wɔse ɔnana barima pe den?
- 90 Chn. : ~~Banku ne nkate nkwan~~
- 91 Tr. : Mmo. Woso wo nana barima aduane ben na wɔ pe? Aboagye
- 92 Aboagye: Me nana barima pe fufuo ne abe nkwan.
- 93 Tr. : Wɔ no nso nana barima pe fufuo ne abe nkwan. Mmo. Aduane a wɔ pe paa. Nti yɛbe twere se. Aduane a wɔpe paa ne. Agorɔ ben paa na wo nana pe? Wonim se mpayinfoɔ nso de agorɔ? Se ewɔhɔ a na wɔn ye hwee a ya na wɔ pe agorɔ bi adi. Den agorɔ? Abigail
- 94 Abigail : Agorɔ a wɔpe ne **ludu**.
- 95 Tr. : Agorɔ a wɔpe ne **ludu**
- 96 Chd. : Agorɔ a wɔpe paa ne bɔɔl bɔ.
- 97 Tr. : Agorɔ a wɔpe paa ne bɔɔl bɔ. Mmo. Akuamoah
- 98 Akuamoah.: Agorɔ paa wɔpe ne oware.
- 99 Tr. : Oware tuɔ Mmo wa ye adeɛ. Agorɔ a wɔpe ne oware. Afei eden aduane na wo nana barima pe? Aduane ben na wɔpe? Aduane a wɔpe nso ne deen? Liticia.
- 100 Liticia. : Aduane me nana barima pe paa ne dɔkuno ne nkruma.
- 101 Tr. : Mmo. Aduane a ne nana barima pe paa ne dɔkuno ne nkruma. ɛɛ Edward woso wo nana barima aduane ben na wɔ pe?
- 102 Edward. : Aduane a wɔpe ne fufuo ne nkrakra.
- 103 Tr. : Aduane a wɔpe ne fufuo. Mo nim se fufuo ne nkrakra eye de paa?
- 104 Chn. : **Yes Miss**
- 105 Tr. : Mo nim saa?
- 106 Chn. : **Yes yɛnim**
- 107 Tr. : Aha aduane a wɔpe ne fufuo enne den?
- 108 Chn. : Nkrakra.
- 109 Tr. : Me so me be ka me nana barima ho asem akyere wo. Ansa na no me pe se me bisa asem a etwa towɔ. Se wahunu. Wope wo nana barima asem paa?
- 110 Chn. : Anne
- 111 Tr. : ehe! ɔhene wo pe wo nana barima asem?
- 112 Chn. : Anne
- 113 Tr. : Aha. eden nti na wope wo nana barima ho asem? Me pe na asem efiri se ya wɔ keka mani. Me boa? Aha. Me pe na asem efiri se. Ka ma yɛntea.
- 114 Chn. : ɔpe ma asem.

- 115 Tr. : Wo, wo na me bisa wo se. Me pe na asem efiri se.
- 116 Chene : efiri se wɔ no nso pe ma sem.
- 117 Tr. : Aha, aha ka se: Me pe na sem efiri se
- 118 Chn. : Me pe na sem efiri se
- 119 Tr. : Winifred. Wo pe wo nana barima ho asem paa?
- 120 Chn. : efiri se biribia me hia bia wɔde ma me.
- 121 Tr. : Mmo mo mmɔ mo nsam ma no
- 122 Chn. : Nsambɔ
- 123 Tr. : ɔse ɔpe ne nana barima ho asem efiri se biribia wɔpe bia wɔde ma no. Afei me nso beka me nana barima ho asem. tea no yiye o! Wo wiee a woso wobe ka wodee. Obia beka ne nana barima ho asem. efiri se obia ne ne nana barima. Me boa anaa? obia ne ne nana barima. Me boa anaa?
- 124 Chn. : **Yes Miss**
- 125 Tr. : Me nana barima din de Owura Owusu. Wadi mfie aduowotwe num. ɔte Kurofoforom. Ne krom ne Asaremankeese. ɔye nipa tenten kɔkɔ. Ne mma ye edu mmeensa. Ne nana nom nso ye. Ne maa ye edu mmeensa, Ne nana nom nso eye aduasa. Wɔye aduma wɔ, wɔye aduma wɔ **Ghana Social**. Dabi. Mepɛ se me ka no Twi. Mbɛ kano Twi. Ase obi ye **secretary** ye ka ne Twi sen? Wɔ ye ɔtwerɛtwere ni. Se wahunu? Aha! Nti ye ka se ye ɔtwerɛtwere ni wɔ. Sika Korabia. Sika Korabia ekyere se bank. Ha. Wɔye ɔtwerɛtwere ni wɔ Sika Kurabia. Afei agorɔ a wɔpe paa ne oware. Naa aduane a wɔpe nso ne banku ne nkruma nkwan. Mepɛ me nana barima asem efiri se wɔ no nso pe ma asem. Me nye adee?
- 126 Chn. : Wa ye adee. [Nsambɔ]
- 127 Tr. : **Yes Mo** mmɔ mo nsam ma me.
- 128 Chn. : Nsambɔ
- 129 Tr. : Afei mepɛ se obi nso sore gyina hɔ. Na deɛ ya twere agu board yi so, wɔ no nso de ndeɔ be hye mu baako baako, baako. Me pe nipa nnan. Ye wo ka ye den?
- 130 Chn. : Ka no den.
- 131 Tr. : Mmo. Hwan na ebe ka ne deɛ kane? Gifty A.
- 132 Gifty A : Me nana barima din de Owura Robert Annor. Wa di nfie aduowotwe baako. Wɔte Kroforom. Ne krom ne Offinso. ɔye nipa
- 133 Tr. : Aee! To wobo.
- 134 Gifty A : ɔye nipa kɔkɔ
- 135 Tr. : Ma anka se nka no den. Ka no den, na emo to wo bo ase
- 136 Gifty A : ɔye nipa kɔkɔ tenten. Ne mma ye mmeensa. Ne nana nom ye nson.
- 137 Tr. : Wo aye adee mmo. Hwan nso biom? Hwan na ebe ka bi ama yen. Aha.
- 138 Chd. : Me nana barima edin de.
- 139 Tr. : Ka no den
- 140 Chd. : Me nana barima din de Mr.
- 141 Tr. : Ka no den
- 142 Chd. : Me nana barima din de Mr. Owusu Kɔkoo

- 143 Tr. : Mr ye ka ne Twi sen?
- 144 Chd. : Owura Kɔkoo
- 145 Tr. : Aha
- 146 Chd. : Owura Owusu Kokoo. Wa di nfie eduasa num. Wɔte Abiripɔ Junction ne krom ne Ampatea. Wɔye nipa teatea tumtum. Ne mma ye nsia. Ne Nana nom nso ye nsia.
- 147 Tr. : Wɔ ye aduma wɔ
- 148 Chd. : Wɔ ye aduma wɔ.
- 149 Tr. : Anaa sɛ wɔ ye Okua ni, ɔye Dokita. Sɛ wahunu. Aha. Dɛn aduma na wɔ ye?
- 150 Chn. : ɔye Okua ni.
- 151 Tr. : Mhum
- 152 Chd. : Wɔye Okua ni. Agorɔ a wɔpɛ ne ludo. Aduane nso a wɔpɛ ne fufuo ne abɛ nkan. Me nana barima pɛ ma asem efiri sɛ wɔ no nso pɛ ma asem.
- 153 Tr. : Aee! Wo nana barima pɛ wa asem efiri sɛ wɔ no nso pɛ wa asem? Ah! Ka no yiye. Mepɛ me nana barima asem efiri sɛ
- 154 Chd. : Mepɛ me nana barima asem efiri sɛ wɔ no nso pɛ ma asem.
- 155 Tr. : Mmo wo aye adeɛ. Hwan nso bio? Mmaa no me pɛ sɛ ɔbaa baako bɛ kasa. Mepɛ sɛ ɔbaa baako bekasa ma mintea. Mmo nkasa? Felicia F
- 156 Felicia F: Me nana barima din de Owura Okyere Darkwa. Wa di nfie nwɔtwe.
- 157 Tr. : Wa di nfie nwɔtwe?
- 158 Chn. : [laughing]
- 159 Tr. : Anaa wopɛ sɛ wo kase wa di nfie aduowotwe?
- 160 Felicia F: Wa di nfie aduowotwe? Wɔte, ɔte Dekyemso. Ofiri Abofour. ɔye, wɔye aduma wɔ KMA.
- 161 Tr. : Wɔye nipa, ɔye nipa mum hum!
- 162 Felicia F : Wɔye nipa teatea kɔkɔ. ɔye aduma wɔ KMA.
- 163 Tr. : Mhum.
- 164 Felicia F: Ne mma ye edu. Ne nana nom ye mmeinuu. ɔye
- 165 Tr. : Wɔye
- 166 Felicia F : ɔye
- 167 Tr. : He ne fa na wɔye aduma?
- 168 Felicia F : KMA
- 169 Tr. : Aha nti fa ka asem
- 170 Felicia F : Wɔye aduma wɔ KMA. Agorɔ a wɔpɛ ne oware
- 171 Tr. : Mmo. Adɛn wopɛ wo nana barima asem?
- 172 Felicia F: Mepɛ me nana barima asem efiri sɛ wɔto ananse sɔm kyere me
- 173 Tr. : Mmo mo mmɔ mo nsam ma no
- 174 Chn. : Nsambɔ.
- 175 Tr. : Wɔse wɔpɛ ne nana barima asem efiri sɛ eyɛ a wɔ ye dɛn?
- 176 Chn. : ɔto ananse sɛm kyere no.
- 177 Tr. : Mmo wo aye adeɛ. Hwan nso bio? Hwan nso bio? Mmo a mo aka mo npegya mon nsa. Nti emmaa ewɔ dan mu ha wɔ he? Mmaa no mo nka bi ma yentea. ehe Shetu.

- 178 Shetu. : Me nana barima de Owura John Abeiku. Wadi nfie ɔha. Wɔte **North Sun**. Wɔte Barikese. Ne krom ne Navrongo. Wɔ ye nipa kɔkɔ tenten. Ne mma ye nson. Ne nana nom ye mmeensa. ɔye Wɔye aduma. ɔye ɔkyerɛkyere ni.
- 179 Tr. : ɔkyerɛkyere ni. Mmo.
- 180 Shetu. : Agorɔ a wɔ pɛ paa ne oware. me pɛ me nana baria asem efiri se me hia biribia wɔtɔ ma me.
- 181 Tr. : Mmo nhwee mo nsam kessee ma no.
- 182 Chn. : Nsambɔ
- 183 Tr. : Aka nipa wɔtwa twɔ. **Yes** Achamfoɔ. Ka no den o!
- 184 Achamfoɔ: Me nana barima din de. Me nana barima din de Owura Kofi Boateng. Wadi nfie ado aduosia ennan.
- 185 Tr. : Aduosia nan. Aha
- 186 Achamfoɔ: Wɔte Ahodwo. Ne krom ne Abomосу. Wɔ ye kɔkɔ tenten. Ne mma ye enum. Ne nana nom ye du baako. ɔye , ɔye Okua ni. Agorɔ a wɔpɛ ne bɔɔlbɔ. Aduane nso a wɔpɛ ne fufuo ne abɛ nkwan.
- 187 Tr. : Mhum
- 188 Achamfoɔ: Me nana barima asem. Mepɛ me nana barima asem efiri se wɔ pɛ, wɔ no so pɛ ma asem
- 189 Tr. : Mmo wo aye adeɛ eyɛ. Afei deɛ ye nyinaa ye bɛ ka abom wo duru bebɛia ya se ketɛ noa na wa ye den?
- 190 Chn. : [Talking together]
- 191 Tr. : Mfa wo deɛ nhyɛ hɔ. Gyae no saa. Ha? . Gyae no saa. Ha? hye aseɛ. Me de abaa no bɛ sisiso. Na wo nso wa ye den?
- 192 Chn. : Na ma kan
- 193 Tr. : Ka ma yɛntea ye. Me Nana barima ho asem.
- 194 Chn. : Me Nana barima ho asem. Me Nana barima ho asem Me Nana barima din di **dash**.
- 195 Tr. : Nka **dash**. Aha
- 196 Chn. : Wadi nfie
- 197 Tr. : Wadi nfie, nfie **dash** Mhum!
- 198 Chn. : Wadi **dash**
- 199 Tr. : Ye hye aseɛ Me nana barima ho asem. Mhum
- 200 Chn. : Me nana barima ho asem. Me Nana barima din di dash. Wadi nfie dash Wɔte dash. Ne krom ne dash. ye dash. Ne mma ye **dash**. Ne nana nom nso ye dash. ɔye dash. Agorɔ a wɔpɛ paa ne **dash**. Aduane wɔ pɛ paa ne **dash**. Mepɛ me nana barima. [Talking together]
- 201 Tr. : Me pɛ na asem efiri se.
- 202 Chn. : Me pɛ na asem efiri se **dash**
- 203 Tr. : Mmo aye adeɛ. Afei wɔ de wo **book** bɛ ma wo. Wɔ kɔ fa aba . na wo atwerɛ. Ha! Wɔde wo **book** ma wo a twerɛ. Deɛ ya se ketɛ bia na wa ye den?
- 204 Tr+Chn: Na wode wodeɛ ahyɛ hɔ.
- 205 Tr. : Deɛ esese wode hye hɔ na wode aye den?
- 206 Chn. : Wode ahyɛ hɔ.

- 207 Tr. : **Start work. Start work.** Nipa na agyeme see?
208 Chn. : [Working].
209 Tr. : **He go and sit down and do the work.**
210 Chn. : [Working].
211 Tr. : **Tack in your shirt.**
212 Chn. : [Working].
213 Tr. : **Those who have finished should come and mark their work.**

APPENDIX 5(4): Mathematics

LESSON : FOUR
TEACHER : TA
CLASS : THREE
SCHOOL : ABORFO SUKUU
SUBJECT : MATHEMATICS
TOPIC : MEASURING LINE SEGMENT
DATE : 7TH FEBRUARY, 1996.

- 1 Tr. : Now children we have maths. When it was Christmas I hope your fathers and mothers bought you either a dress, a shoe, a shirt, or a trousers. Now before you mother or father bought the trousers or a shoe for you, what did she use or he use to measure you? Aha. Joyce what did she use?
- 2 Joyce. : [Inaudible]
- 3 Tr. : Louder
- 4 Joyce. : She used a broom
- 5 Tr. : He used a broom. A broom stick, isn't it?
- 6 Chn. : Yes Miss
- 7 Tr. : Right. What other thing did your mother use? Sammy. What did she use?
- 8 Chn. : My mother used a ruler.
- 9 Tr. : A ruler? Thank you very much. To measure your length. Right. What did your father use or your mother use to measure you?
- 10 Chn. : She used a chalk.
- 11 Tr. : A chalk? Mhum. What other thing? Alfred.
- 12 Chn. : She used a box
- 13 Tr. : Again
- 14 Chn. : She used a box
- 15 Tr. : A box? To measure what?
- 16 Chn. : My foot
- 17 Tr. : Your foot? A box. Okay. Now we have so many things that we can use to measure things. Yes you
- 18 Chn. : She used. She used a paper and she cut my leg on it she go and buy me
- 19 Tr. : He said, her mother, his mother eh, traced his foot on a sheet of paper and the cut it and took it to the market. Thank you very much. now, there are so many ways that we can measure things. There are so many ways that we can measure things. First we can use. What is this?
- 20 Chn. : A tape
- 21 Tr. : Again
- 22 Chn. : A tape measure.
- 23 Tr. : Don't say tape. When we say tape, it's the one we use at home. We use it to play music. Ha! ape recorder. This is a tape measure. Say it.
- 24 Chn. : A tape measure.
- 25 Tr. : Then you can also use a ruler. A what?

- 26 Chn. : A ruler. Then we have meter tape. When you go to the market, the one they use like this one. Is very long. Ha? It's longer than a ruler. That one they use to measure material. You understand.
- 27 Tr. : Yes. We can also use ruler. What other things can you use to measure things. Harry
- 28 Harry : A stick.
- 29 Tr. : A stick. That's what I said. The meter stick. Aha
- 30 Chd. : A dress.
- 31 Tr. : A dress. You can use a dress to measure things?
- 32 Chd. : [Inaudible]
- 33 Tr. : Your mother did what?
- 34 Chd. : My mother took my home dress to the shop
- 35 Tr. : Ah! So you used an old dress to buy you a new one. She used it at the market. Thank you very much. Right. We can also use our palm like this. Your hand. Mum! If I want to measure this boy's table. What I will have to do is to use my hand to measure it. One, two and then
- 36 Chd. : Half
- 37 Tr. : Half. So I can use my palm to do what? Measure. I can use my what?
- 38 Chn. : Hand
- 39 Tr. : Right. We also have this. You can use your leg. Your feet like this, two, three, four, five, six, seven and so on and so forth. So there are so many ways that we can do what?
- 40 Chn. : Measure things
- 41 Tr. : So we can measure things in so many ways. We can use the what?
- 42 Chn. : The tape
- 43 Tr. : You can use what?
- 44 Chn. : A tape
- 45 Tr. : A tape measure. You can use eh,
- 46 Chd. : Ruler.
- 47 Tr. : A ruler, eh what other things?
- 48 Chn. : A stick.
- 49 Tr. : A stick.
- 50 Chn. : A chalk
- 51 Tr. : A broom
- 52 Chn. : A stick.
- 53 Tr. : A stick. Thank you. You can use, you can also use a watch, a string You know a string? Yes let me show you one. This is one. You can use a string Like the boys are doing in the book to measure things. Now I want us to use the tape measures we brought, the rulers and the sticks to measure our table. Measure it and tell me what you got. I will call you so that you tell me the number of inches. I want you to use the inches. The one written boldly. Like this aha! Use this one to measure. Measure it. Those using ruler should also measure, measure the length of the table. Like this. Ha! And tell me.
- 54 Chn. : [Working].
- 55 Tr. : When you finish raise up you hand I will call you.

- 56 Chn. : [Working]
- 57 Tr. : Yes some pupils are using their palm to do it. Others are using their tape measures. Some also are using the eh, ruler. That is all good. Right. Those using tape measure. How many inches did you get? How many inches? Godwin
- 58 Chd. : I get fifty
- 59 Tr. : I got
- 60 Chd. : I got fifty three
- 61 Tr. : Fifty three what?
- 62 Chd. : Fifty three
- 63 Tr. : Inches.
- 64 Chd. : Inches.
- 65 Tr. : Thank you very much. What did you get?
- 66 Chd. : I got twenty inches
- 67 Tr. : Twenty inches. What did you get?
- 68 Chd. : I got thirty inches
- 69 Tr. : Thirty inches. Who else? Thank you very much.
- 70 Chn. : [Talking together].
- 71 Tr. : Quiet. What did you get? Abrafi?
- 72 Abrafi. : I used my hands
- 73 Tr. : Louder
- 74 Abrafi. : I used my hands. I got two and half inches
- 75 Tr. : You used your span. You got two and half. Thank you very much. Now, it means the tables that we measured the are, they don't have the same what? Length. They are different length. I want this place to be quiet. Stop measuring. We have finished with that. Yes Right. So we can use our spans. Some people used span. others used tape and yet others used rulers to measure. Right now I want you to take your rulers, ha! Take your ruler. You see that we have centimetres then inches. When you look on your ruler. Those written boldly, ha! Are the cen eh, inches and those here are the centimetres. No w can you see that on your ruler?
- 76 Chn. : Yes Miss
- 77 Tr. : Right. So use your ruler to the table and tell me how many inches you get.
- 78 Chn. : [Working]
- 79 Tr. : How many is that? How many inches?
- 80 Chd. : Twelve inches
- 81 Tr. : Aha. Yes, how many did you get?
- 82 Chd. : Eleven and half inches
- 83 Tr. : Eleven and half. Yes.
- 84 Chd. : I got one and half inches
- 85 Tr. : One and half. Then your table is too small. Thank you. All right. Now today we are going to measure the line segments that we have in the book. You see we have some line segments in the book. When you look at page 57 of your maths textbook. You see that they've written "Measuring Line segments." Ha! Measuring line what?
- 86 Chn. : Segments.

- 87 Tr. : And then you see a line drawn like this. And then they have written some letters
- 88 Chn. : "B and O.B. O. B.
- 89 Tr. : You can't say O. B. Say line OB
- 90 Chn. : Line OB
- 91 Tr. : No, no
- 92 Chn. : OB
- 93 Tr. : NO. NO. Say line segment OB. or Line OB You understand?
- Class so what name do you give to this line?
- 94 Chn. : Line segment OB.
- 95 Tr. : OB. Now I want you to take your ruler and measure line segment OP.
- 96 Chn. : Measuring.
- 97 Tr. : No you the centimetres.
- 98 Chn. : Measuring
- 99 Tr. : How many centimetres did you get?
- 100 Chd. : [Inaudible]
- 101 Tr. : How many is that?
- 102 Chn. : Five
- 103 Tr. : Five what?
- 104 Chn. : Centi
- 105 Tr. : Five what
- 106 Chn. : Five
- 107 Tr. : Five what
- 108 Chn. : Five Centi, centis
- 109 Tr. : Five what?
- 110 Chn. : Five centimetres.
- 111 Tr. : Five centimetre. Right. What did you get?
- 112 Chn. : Eleven centimetres.
- 113 Tr. : Then you didn't use it. No. That is not the centimetres. Use this part. Mum. This is inches and this is the centimetres. Ha! Centimetres is the same as centimetres. So use this place. Mum! You see, aha.
- 114 Chn. : [Working].
- 115 Tr. : Let me see.
- 116 Chn. : Eight centimetres.
- 117 Tr. : No. Line. Ah! You are measuring OP.
- 118 Chn. : Wei see
- 119 Tr. : Ah! Then is ten. Thank you. Okay
- 120 Chn. : [Working]
- 121 Tr. : Let me see yours. How many did you get?
- 122 Chd. : Ten centimetres
- 123 Tr. : You also got ten centimetres. No don't use the tape measure use the rulers only. You understand.
- 124 Chn. : Yes Miss
- 125 Tr. : Use the ruler, ha Mum hum! Use the ruler. Measure line OP. Line OP. Yes. How many did you get? Edward. How many did you get?
- 126 Edward : One twenty.

- 127 Tr. : One twenty what? Cedis
- 128 Edward: One twenty metres. One twenty
- 129 Tr. : What are we using? What did I say you should use?
- 130 Chd. : Ruler
- 131 Tr. : Ruler and what? You should measure in what?
- 132 Chn. : Centi, Centimetres
- 133 Tr. : Centimetres. So don't say one thirty metre. Yes how many did you get?
- 134 Chn. : Nine and half
- 135 Tr. : Nine and half what? Don't say that I don't like that. Say nine and half. If it's cedis say cedis, if it's pesewas say pesewas. If it's centimetres say nine and half centimetres
- 136 Chn. : Nine and half centimetres
- 137 Tr. : Okay. Right. The correct, the correct one is ten centimetres. Those who got ten raise up your hands.
- 138 Chn. : Show of hands
- 139 Tr. : Very good. Very good. Now I want you to measure line GH. Line GH. Line segment GH. Measure it
- 140 Chd. : G. G
- 141 Tr. : Measure it. Measure it. This is GH. In centimetres Oh!
- 142 Chn. : [Working].
- 143 Tr. : If you finish just raise up your hand. If you finish measuring raise up your hand. Line, line segment GH. How many did you get?
- 144 Chn. : I get six
- 145 Tr. : I got
- 146 Chn. : I got six
- 147 Tr. : Six what? I just told you I don't like six, six. Then you stop
- 148 Chn. : Six centimetres.
- 149 Tr. : Can't you speak louder? Yes.
- 150 Chn. : I got six centimetres.
- 151 Tr. : Six centimetres! Aha. Any different answer?
- 152 Chn. : Yes Madam
- 153 Tr. : Any different answer? Somebody said he got six. What did you get?
- 154 Chn. : I get
- 155 Tr. : I got
- 156 Chn. : I got five centimetres
- 157 Tr. : Five centimetres. What about you? Sandra.
- 158 Sandra. : I get
- 159 Tr. : I got. Everybody say I got
- 160 Chn. : I got
- 161 Tr. : Mhum
- 162 Sandra. : Four and half centimetres
- 163 Tr. : Somebody said she got four and half. So we have got three answers now. Somebody said he got six, centimetres another one says he got five
- 164 Chn. : Five centimetres is correct
- 165 Tr. : And then five and half or five point five.

- 166 Chn. : [Talking together]
 167 Tr. : Aha
 168 Chn. : Which of them is correct?
 169 Tr. : Okay I am also going to measure mine.
 170 Chn. : [Talking together]
 171 Tr. : So those who got five, yes five. Five is correct. Is five centimetres
 172 Chn. : [Talking together].
 173 Tr. : Okay. That is that.
 174 Chn. : [Talking together].
 175 Tr. : We are on line, line. Oh keep quiet. Keep quiet. Keep quiet.
 Right. Measure line AB. Line segment AB. Why didn't you bring ruler, pen.
 Where is your ruler? Ha? You don't have some. A school girl must have a ruler.
 176 Chn. : [Talking together]
 177 Tr. : Measure line AB. Line segment AB. Did I say you should talk?
 178 Chn. : No Miss
 179 Tr. : I said you should measure.
 180 Chn. : [Talking together].
 181 Tr. : Aha! Have you finished?
 182 Chn. : Yes Miss
 183 Tr. : Line segment, line segment AB.
 184 Chn. : Teacher we should use the tape.
 185 Tr. : No, no please I said use ruler.
 186 Chn. : [Talking together].
 187 Tr. : The same thing. Those who don't have ruler. You can use the tape measure. If you don't have ruler, use the tape measure. Is the same thing
 188 Chn. : [Talking together].
 189 Tr. : No, no the room is too noisy. I hope you are not measuring with your mouths. Are you?
 190 Chn. : No Miss.
 191 Tr. : Yes. So make sure you make the place a bit. You are still talking.
 192 Chn. : [Talking together]
 193 Tr. : Hey! How many did you get?
 194 Chn. : I got six, seven, seventeen measure
 195 Tr. : Seventeen?
 196 Chn. : Measure,
 197 Chd. : Oh!
 198 Chd. : Measure, measure me! Measure
 199 Tr. : Now I said you should measure in what?
 200 Chn. : Centimetres.
 201 Tr. : So you've got seventeen what?
 202 Chd. : Seventeen metres
 203 Tr. : Seventeen centimetres. Who else? Yes.
 204 Chd. : Seventeen centimetres.
 205 Tr. : You too you got seventeen. What did you get?
 206 Chd. : Seventeen centimetres

- 207 Tr. : Seventeen centimetres. This is how it should be. That's why you are not getting the correct thing. This how it should be. Ha! You see, you see it? You see? How many is that.
- 208 Chd. : Seventeen
- 209 Tr. : Seventeen centimetres. Yes. If you don't measure it well you won't get the correct eh, this thing that you want. I want a different answer. Has anybody got a different answer? Prince. How many did you get?
- 210 Prince. : I get.
- 211 Tr. : I got
- 212 Prince. : I got eighteen centimetres
- 213 Tr. : Eighteen centimetres. So we've got seventeen and eighteen. Wait I am going to measure mine.
- 214 Chn. : Seventeen, eighteen
- 215 Tr. : Okay you wait. Don't talk
- 216 Chd. : Don't talk
- 217 Tr. : Seventeen is correct
- 218 Chn. : Hey!
- 219 Tr. : It's okay. Those who got seventeen is correct. Now I said use tape. I want the answer in centimetres. So you have to use this one. Ha! Use this area and those using the ruler too. Use centimetres. This one. Okay?
- 220 Chn. : Yes Miss.
- 221 Tr. : Right. Who doesn't understand?
- 222 Chn. : A child raises his hand.
- 223 Tr. : You don't understand what we are doing? What's your problem?
- 224 Chd. : I don't understand because the G and H
- 225 Tr. : The G and the H The G and the ah! Somebody oh! Somebody is asking a question. Listen. Somebody says he doesn't understand. I asked him why? And he said he doesn't understand the eh the G and the H. What do you think? What do you think? What can you say about that. The G and H. shein Judd help her.
- 226 Judd. : Centimetres
- 227 Tr. : The G and the H is the centimetres
- 228 Judd. : No
- 229 Tr. : If your friend tell you "Ah I don't understand it" What will you say? Mhum
- 230 Judd. : It's just a number
- 231 Tr. : It's just a number? You nearly got it. What can you say? Kafuei
- 232 Kafuei. : She was playing.
- 233 Tr. : She was playing. Now the G and the H is the name of the line. That all. It doesn't mean anything. The name of the line. You understand?
- 234 Chn. : Yes Miss
- 235 Tr. : I can draw a line like this. I can draw a line and I can give it any name that I like. I can say its line segment AD. So the A and the D is the name of the what?
- 236 Chn. : The line
- 237 Tr. : The line segment. Ha!
- 238 Chd. : Yes Miss

- 239 Tr. : The line starts from the A to the D. So that's why we've given it the name line segment A D
- 240 Chn. : Line segment
- 241 Tr. : Aha! A
- 242 Chn. : D
- 243 Tr. : You see so this is not difficult. Don't tell me you don't understand. Ah! Now I want everybody to take his class exercise book. Take your ruler or tape measure and measure these exercises in centimetres. Okay!
- 244 Chd. : Yes Miss
- 245 Tr. : You measure number. Measure numbers three, four, five, six, and seven. Ah!
- 246 Chn. : [Talking together]
- 247 Tr. : Measure line segment. Line segment. Ha?
- 248 Chn. : [Talking together]
- 249 Tr. : Exercise, number, exercises numbers
- 250 Chn. : Number one
- 251 Tr. : No number one is not. We've done numbers one and two. So from number three, numbers, numbers three, four, five, six and seven And what?
- 252 Chn. : Seven
- 253 Tr. : Seven. So you have five exercises. Take your take the textbook.
- 254 Chd. : [Inaudible]
- 255 Tr. : He says what?
- 256 Chn. : [Inaudible]
- 257 Tr. : Yes, it should be in centimetres. You see the exercises here. Line segment AB is dash centimetres. It means you are going to use the centimetres on the, your tape. Tape measure. Ha! To measure it. You understand?
- 258 Chn. : Yes please
- 259 Tr. : Do you understand?
- 260 Chn. : Yes please
- 261 Tr. : Right. So you do exercise three, to seven. When you are numbering it then you number it one, two, three, four, and five. Okay.
- 262 Chn. : Yes please.
- 263 Tr. : Take your class exercise books. I hope everybody has got one of the textbook.
- 264 Chn. : Yes please.
- 265 Tr. : Mhum. We turn to page 57 and then do that exercises in the book. You are not going to draw the line oh! Don't draw the line segment. You only measure and then write. Lets say number one. Line segment MN is dash centimetres. So you measure line segment MN. Like this. Where is Mn? ehein this is it. You measure it like this and then this is 6 . 5
- 266 Chd. : Go and sit down
- 267 Tr. : Mum. Sometimes you see that on your rulers. Look here. On your rulers you have, 1, 2, 3, 4, 5. Then 6, 7, 8, 9, 10. Ha! Ha! There is a short line between number one and two. Have you seen that?
- 268 Chd. : Yes please
- 269 Tr. : Mum.
- 270 Chn. : Yes please.

- 271 Tr. : Let us say this is one and then, this is two. There is a line in the middle of one and two. Like this. This is point five. So if you measure and you come to this end, it should be line segment AD is equals to, lets say one point
- 272 Chn. : Five
- 273 Tr. : Five what?
- 274 Chn. : Centimetres.
- 275 Tr. : You understand
- 276 Chn. : Yes Please.
- 277 Tr. : It is not up to two so it is point five. Wote dee me ka no ase?
- 278 Chn. : Yes please
- 279 Tr. : Aha. Start work. Start work. Give them their exercise books. The maths exercise books.
- 280 Chn. : [Talking together].
- 281 Tr. : Don't talk please.
- 282 Chn. : [Working].
- 283 Tr. : Where is your ruler?
- 284 Chn. : Shows teacher the ruler.
- 286 Tr. : This ruler? But this line let me see. This one is not good. You don't have. What! Look at this.
- 287 Chn. : [laughing].
- 288 Tr. : You're laughing . How are you going to measure?
- 289 Chn. : [Working].
- 290 Tr. : He! sit straight.
- 291 Chn. : [Talking together].
- 292 Tr. : Tofique would you keep quiet.
- 293 Chn. : [Working]
- 429 Tr. : Remember I said you shouldn't draw the lines.
- 295 Chn. : Yes Miss
- 296 Tr. : Yes. You only have to measure. You are eh! Hurry up.
- 297 Chn. : [Working]
- 298 Tr. : He! Stop making noise with your ruler. Ah!
- 299 Chn. : [Working].
- 300 Tr. : You have ten minutes to finish with this.
- 301 Chn. : [Working].
- 302 Tr. : He! Judd, you can't talk and write at the same time.
- 303 Chn. : [Working].
- 304 Tr. : [Inaudible]
- 305 Chd. : [Inaudible]
- 306 Tr. : If you can't speak louder go and sit down.
- 307 Chn. : [Working].
- 308 Tr. : Don't write [inaudible] write one [inaudible]. Haven't I told you not to do that again? Hum? Why? Don't you know it's your class exercise book? Woa look!
- 309 Chn. : [Working]
- 310 Tr. : Don't use this for this. Go, go, go, go and look for pen
- 311 Chn. : [Working]
- 312 Tr. : Where did I say you should start from?

- 313 Chn. : Number three
- 314 Tr. : Look at what you have written here.
- 315 Chn. : [Working].
- 316 Tr. : This time everybody has to be able to answer the question
- 317 Chd. : [Inaudible]
- 318 Tr. : You don't have pen. Why did you come to tell me? Ha! Speak louder
- 319 Chn. : [Inaudible]
- 320 Tr. : I can't here you. Why did you come me? Did you tell anybody?
- 321 Chd. : No
- 322 Tr. : Ha! Did you send any message?
- 323 Chn. : [Working].
- 324 Tr. : Where's your pen?
- 325 Chn. : [Inaudible]
- 326 Tr. : Rapheal why is it that you always borrow pen from others? Ha!
- 327 Chn. :
- 328 Tr. : Don't you buy pen?
- 329 Chn. : [Working].
- 330 Tr. : Go to the table and place the books in the middle
- 331 Chn. : [Working].
- 332 Tr. : You don't have a book. Go and take mine
- 333 Chn. : [Talking together]
- 334 Tr. : Take mine. You are standing there. Where is my textbook?
- 335 Chd. : It's in the cupboard.
- 336 Tr. : ehein! Go for it!
- 337 Chn. : [Working and talking together].
- 338 Tr. : Those who have finished can go and put their books down. Those who have not finished ten minutes more
- 339 Chn. : [Working and talking together].
- 340 Tr. : Get ready to stop work.
- 341 Chn. : [Working and talking together].
- 342 Tr. : Felicia A, Felicia A come. Come and look at this. You didn't measure it well. Number [inaudible] where is it? Line MN. Look at it oh! Is it up to seven? Hein seven is here. This is 1, 2, 3, 4, 5, 6. But you see the line ends here. So it's no up to seven. It's six point [Inaudible] Mum! So go and do you correction. Hanna Agei Boateng come
- 343 Chn. : [Working].
- 344 Tr. : Hanna Agei Boateng come. You didn't measure it well. Look at this one. Line segment AB Look. It's how many centimetres?
- 345 Hanna : 18
- 346 Tr. : No, it's not 18. Look at well. How many centimetres ? Ha How many centimetres Can't you see it?
- 347 Chn. : 18
- 348 Tr. : Is it 18?
- 349 Chn. : 17
- 350 Tr. : 17 centimetres. And let look at this. Look at EF. EF look at it. Is what?

351 Chn. : Six centimetres.
 352 Tr. : Six centimetres?
 353 Chn. : Eight centimetres.
 354 Tr. : You've written nine. I don't know how you did it. Even if you
 used

APPENDIX 5(5) TB: Ghanaian Language

- LESSON : FIVE
 TEACHER : "TB"
 CLASS : FOUR
 SCHOOL : ABORFO SUKUU
 SUBJECT : GHANAIAN LANGUAGE (GRAMMAR)
 TOPIC : DIN PA ENNE DIN HUNU (COMMON & PROPER NOUNS)
 DATE : 14TH FEBRUARY, 1996
- 1 Tr. : edin, se ye kase edin a na edin enne den?
 - 2 Chd. : enipa din
 - 3 Tr. : Nipa din. Aane. ebetumi aye nipa din?
 - 4 Chn. : Sir, sir.
 - 5 Tr. : Obia enfre me
 - 6 Chd. : Aboa din, aboa din.
 - 7 Tr. : ebetum aye aboa din.
 - 8 Chd. : Kro din.
 - 9 Tr. : ebetumi nso aye kro din.
 - 10 Chd. : Nneema din.
 - 11 Tr. : ebetumi aye nneema din.
 - 12 Chd. : Dua din
 - 13 Tr. : ebetumi aye dua din.
 - 14 Chd. : Trolley din
 - 15 Tr. : eden nea? Yede yeden?
 - 16 Chn. : eye adee a ye de nneema gu mu pia
 - 17 Tr. : Se wahunu! Ye yeka Twi no, w no dee woka Borfo o!
 ekyere se w no dee wote Borfo paa. ehe, edin eye den?
 - 18 Chn. : Nipa din.
 - 19 Tr. : ebetumi aye nipa din.
 - 20 Chd. : Kro din
 - 21 Tr. : ebetumi aye kro din. ehe.
 - 22 Chd. : Aboa din
 - 23 Tr. : ebetumi aye aboa din. ebetumi aye
 - 24 Chd. : enneema din
 - 25 Tr. : ebetumi aye enneema din. Yes
 - 26 Chn. : Nsuo bi din
 - 27 Tr. : ebetumi aye nsuo bi din. Efa.
 - 28 Chn. : Wan kasa
 - 29 Tr. : Yes ennee edin eye nsem bia yede hye enneema bi agyinae.
 edin eye nsem bi a yede hye nneema bi agyinae.
 - 30 Chn. : W n nyinaa ekasa.
 - 31 Tr. : Se wahunu. Fa k ma no bra.
 - 32 Chn. : W n nyinaa ekasa

- 33 Tr. : esoso ye nyinaa agye atum se nawɔtwe a etese enne ye kase edin eye nsem bia yede hye agyirae te se sukuu, afuom, dua, Kofi, Kumasi Nkrae, Koforidua. Me yira afiri bi. Hwan na ede kane akae me? Kae me bi.
- 34 Chn. : Atadee
- 35 Tr. : Atadee
- 36 Chn. : Wawa
- 37 Tr. : Wawa. Mmo nkae me bi
- 38 Chn. : efie
- 39 Tr. : Kae me bi.
- 40 Chn. : **Book**
- 41 Tr. : Kae me bi
- 42 Chn. : nyame dua
- 43 Tr. : Kae me bi.
- 44 Chn. : Hyee
- 45 Tr. : Kae me bi. Obi eka biribi. Kae me wɔse den nea?
- 46 Chn. : Wɔse **book**
- 47 Tr. : **Book, wɔse book**
- 48 Chn. : **Sir, sir.**
- 49 Tr. : eye. Me twere ne nyinaa agu board no so (Wɔ twere agu ade sua an no ho).
- 50 Chn. : Wɔn nyinaa ekasa.
- 51 Tr. : edin eye nsem bia yede hye nneema bi agyirae. Se ebia sukuu kro, nipa
- 52 Chn. : Atadee
- 53 Tr. : Mmo
- 54 Chn. : [Kasa] [Talking together].
- 55 Tr. : eye, se wo wɔ biribi a pagya wo nsa na mabɔ wo din. Peaceful
- 56 Peaceful: Asɔre
- 57 Tr. : Asɔre. Mabel.
- 58 Mabel : Sukuu
- 59 Tr. : Sukuu. Ma twere dada
- 60 Chn. : Wawa.
- 61 Tr. : Wawa. Mmo. Wawa, wawa. Beatrice
- 62 Beatrice: Nyamedua
- 63 Tr. : Nyamedua. Mmo. enne dee ekikakika ho no nyinaa. Beberee Se ye kase ye ka nka yebe ka beberee. Ne nyinaa y den nea? edin. edin. Na enne nea yebe abe yɔ. Ye beye edin hunu.. edin hunu. edin hunu ene edin pa Yee dee yede ye de kaekae ye ho kwa. edin hunu ene edin pa. Ye adikan ahunu edin. Sedee edin se tee. edin eye nsem a yede hye nneema agyirae. Seesei se ye ka se edin hunu a edebɛn enna eba wo tiri mu? Din hunu. edin hunu. enno kora na. Tea dee Atifa ekakyere yen. edin hunu. Atifa, edin hunu yeden?
- 64 Atifa : edin hunu ye asem a yeka ema ye nhunu adekoro pɔtii.
- 65 Tr. : Mmo mmɔ mo nsam ma no.
- 66 Chn. : [Nsam mmɔ][clapping].

- 67 Tr. : Se wahunu. Ye adikan akase edin eye nsem bi a yede hye nneema bi nkroenkore agyirae. enti edin hunu eye, wase nsem bi a yekaa ye nhunu adee pɔtii. Mmo mmɔ mo nsam bio ema no.
- 68 Chn. : [Nsam mmɔ]
- 69 Tr. : Adee bi wɔhɔ a wo ka a enipa beberee. Biribi tese Kofi. Kofifoɔ sen na ewɔ dan mu ha? Kofifoɔ mpagya wɔn nsa. Kofi se wahunu? Nti obi ba dan mu ha na wɔ kase Kofi sore a, Kofi hwan na ebe soree?
- 70 Tr.+Chn. : Wɔm nyinaa
- 71 Tr. : Se wahunu. ehe ne foɔ na ede Yaw wɔ dan mu ha? Obia nsore ngyina hɔ. Yawfoɔ. Se wahunu! Yaw, Yaw, Yaw, Yaw, Yaw. Se wahunu. Obia ntenase. Se wahunu. Me kyere se wo ka dua, dua. Ndua dee ye wɔ ndua beberee. Nti se wo kase dua a, obia ehunu dua pɔtii a woka. Se wahunu! Ama Kofi, Kwaku, kro, se wahunu. Ne nyinaa ye den nea a? eye edin hunu. **Yes**, ehe!
- 72 Chd. : Atadee
- 73 Tr. : Atadee. Mmo. O! Atadee ebi ena ehye me yi. ebi ena ehye me wei. Atadee ye wɔ beberee. Nti mo nkeka edin no bi ma me ntwerɛ ngu **blackboard** no so. ehe!
- 74 Chd. : Asɔre
- 75 Tr. : Asɔre. Ye wɔ asɔre, asɔre ahodoɔ beberee. Hwan na ebɛbubɔ bi ema ma tea? ehe!
- 76 Chd. : **Church of Christ.**
- 77 Tr. : **Church of Christ.** Foforɔ
- 78 Chn. : **Pentecost**
- 79 Tr. : **Pentecost.** Foforɔ
- 80 Chn. : **Roman.**
- 81 Tr. : **Roman.** Se wahunu!
- 82 Chn. : **Sir, sir, sir.**
- 83 Tr. : eye, eye Se wahunu asɔre eye beberee. Efa wo apagya wo nsa. Efa wope se wo ka asem ben?
- 84 Efa : Kaa
- 85 Tr. : Kaa, wa hunu se kaa so doɔso. Nti ebi de sen?
- 86 Chn. : Dede
- 87 Tr. : Hee! Pagya. Hee! Hee!. Efa se kaae. Kaa no ebi ne dee ewɔ he? Osei.
- 88 Chn. : **Mitshibusi**
- 89 Tr. : **Mitshibusi** eye kai.
- 90 Chn. : **Mobitel**
- 91 Tr. : **Mobitel.** Aee!
- 92 Chn. : [Laughing].
- 93 Chd. : Akonnwa.
- 94 Tr. : Akonnwa. Wa hunu se ye wɔ akonnwa beberee. Hwan na ebɛtumi abɔ akonnwa no bi din ma matea? Akonnwa. Utuka.
- 95 Utuka. : Assesɛdwa.
- 96 Tr. : Assesɛdwa. mo mmɔ mo nsam ema no.

- 97 Chn. : Nsam mm.
- 98 Tr. : Assesedwa. Wa hunu se wode biribi hye hu? Assesedwa. Se wahu eye akonnwa. But eye akonnwa bia eye sonoko. ehum!
- 99 Chd. : Mpabua
- 100 Tr. : Mpabua. Wa hunu se ye w mpabua hodo beberee. Hwan na ebetumi ab mpabua no bi din ama matea?
- 101 Chn. : **Sir, sir, me, sir, me sir.**
- 102 Tr. : ehe!
- 103 Chd. : **Sandals**
- 104 Tr. : **Sandals.** ehe!
- 105 Chn. : Opanka.
- 106 Tr. : Opanka. ehe!
- 107 Chn. : **Sir, sir, sir.**
- 108 Tr. : Opanka. O! Dee edikan no, yehunu se edin eye nsem bia yede hye nneema nkrenkore bi den? Agyirae. Afei nso ya hunu se edin hunu eye nsem bi a yede hye nneema nkoenkore bi efa ne fa. Se wahunu. Nti seye kase ebia kaa a, ye nhunu kaa kor. Ye nim kaa kor. Ye kase kro a ye nim kro kor. Ye w nkro beberee. Na me befre nipa mmeensa anna ennan ema w m ab nkro din. Pagya wo nsam na ye dii, na me be ba woh. B kro baako din ma me ntie
- 109 Chd. : Dormaa
- 110 Tr. : B kro baako din ma me ntie.
- 111 Chd. : Sunyani
- 112 Tr. : Sunyani. eye obia be b bi. B kro baako din.
- 113 Chd. : Odumasi.
- 114 Tr. : Odumasi. B kro baako din.
- 115 Chd. : Sewia
- 116 Tr. : Sewia
- 117 Chd. : Jachie.
- 118 Tr. : Jachie
- 119 Chd. : Kumawu
- 120 Tr. : Kumawu
- 121 Chd. : Accra
- 122 Tr. : Accra
- 123 Chd. : Adum
- 124 Tr. : Adum
- 125 Chd. : Nyankyereasi
- 126 Tr. : Nyankyereasi
- 127 Chd. : Fankyenebra
- 128 Tr. : Fankyenebra
- 129 Chd. : Apatrapa
- 130 Tr. : Apatrapa
- 131 Chd. : Effiduasi
- 132 Tr. : Effiduasi
- 133 Chd. : Konongo
- 134 Tr. : Konongo

- 135 Chd. : Kokofu
- 136 Tr. : Kokofu. Ye awei hɔ. Afei me bisa asem bio a ekɔ wɔm hɔ. ebɛba bɛbia Foforɔ nsoso. Se wahunu wɔm abɔ nkro bɛberee din. Se wahunu nkro bɛberee din enna wɔm abɔ ma yatea. edin a wɔm bɔ ye no nyinaa, eye den nea? eye nkro. Se wa hunu. A eye. Afei edin hunu, yɛka aboa nsoso a, aboa nso eye den nea? edin hunu. Nti me bɛ ma line wei foɔ nyinaa abɔ mboa din ama yatea.
- 137 Chn. : Apɔnkye.
- 138 Tr. : Apɔnkye.
- 139 Chn. : ɔtwe
- 140 Tr. : ɔtwe
- 141 Chn. : ɔwɔ
- 142 Tr. : ɔwɔ
- 143 Chn. : Nantwie
- 144 Tr. : Nantwie
- 145 Chn. : Kraman
- 146 Tr. : Kraman
- 147 Chn. : ɔsono
- 148 Tr. : ɔsono
- 149 Chn. : Adue
- 150 Tr. : Adue
- 151 Chn. : ɔkɔtɔ
- 152 Tr. : ɔkɔtɔ
- 153 Chn. : Akura
- 154 Tr. : Akura
- 155 Chn. : **Fish**
- 156 Tr. : **Fish**
- 157 Chn. : Asensa
- 158 Tr. : Asensa
- 159 Chn. : Kusei
- 160 Tr. : Kusei
- 161 Chn. : ɔkra
- 162 Tr. : ɔkra
- 163 Chn. : Akura
- 164 Tr. : Akura
- 165 Chn. : Adanko
- 166 Tr. : Adanko
- 167 Chn. : Prɛko
- 168 Tr. : Prɛko. Se wahunu!
- 169 Chn. : [Laughing].
- 170 Tr. : Wei no mo nyinaa wɔm ye den nea? Wɔm ye nboa. Se wahunu. Aha, wɔm nyinaa wɔm ye nboa. Afei deɛben bio na yebe kaho asem?
- 171 Chd. : Onipa din.
- 172 Tr. : Onipa din? Ka bi ma me ntie
- 173 Chd. : Ama.
- 174 Tr. : Ama.

175 Chd.	:	Kwesi
176 Tr.	:	Kwesi
177 Chd.	:	Kwaku
178 Tr.	:	eden?
179 Chd.	:	Kwabena.
180 Tr.	:	Kwabena
181 Chd.	:	Afia
182 Tr.	:	Afia
183 Chd.	:	Yaw
184 Tr.	:	Yaw
185 Chd.	:	Owusu
186 Tr.	:	Owusu
187 Chd.	:	Maame Adowa
188 Tr.	:	Maame Adowa.
189 Chd.	:	Akua
190 Tr.	:	Akua
191 Chd.	:	Yaa
192 Tr.	:	Yaa
193 Chd.	:	Akwesi
194 Tr.	:	Akwesi
195 Chd.	:	Kwabena
196 Tr.	:	Kwabena
197 Chd.	:	Kwaku Mensah
198 Tr.	:	Kwaku Mensah
199 Chd.	:	Yaw
200 Tr.	:	Yaw
201 Chd.	:	Abena
202 Tr.	:	Abena
203 Chd.	:	Owura Kofi
204 Tr.	:	Owura Kofi
205 Chd.	:	Afiriye
206 Tr.	:	Afiriye. Sɛ wahunu.
207 Chn.	:	Wɔm nyinaa ekasa
208 Tr.	:	ɛyɛ seesei yabɔ nkro din. Yabɔ nkro hodoɔ beberee. Yabɔ nboa beberee nso din. Aka eden bio din na yɛ bɔ yɛ
209 Chn.	:	Atadeɛ, sir , atadeɛɛ, sir .
210 Tr.	:	ɛyɛ.
211 Chn.	:	Atadeɛ
212 Tr.	:	Row one mo awei mo de. Row one mo awei mo de. Row two mo nso awei mdeɛ. enna row three mo nsoso awei modes. Aka row four . Nti yɛbɛ ka nadeɛ din.
213 Chn.	:	Sir, sir.
214 Tr.	:	ɛhɛ.
215 Chd.	:	Hyɛda
216 Tr.	:	Hyɛda
217 Chd.	:	T-shirt

- 218 Tr. : **T-shirt**
- 219 Chd. : **Coat**
- 220 Tr. : **Coat**
- 221 Chd. : **Knickers**
- 222 Tr. : **Knickers**
- 223 Chd. : Kaba
- 224 Tr. : Kaba
- 225 Chd. : Pemin
- 226 Tr. : Pemin
- 227 Chd. : Silit
- 228 Tr. : Silit ehe
- 229 Chd. : **Leg**
- 230 Tr. : **Leg**
- 231 Chd. : **Up and down**
- 232 Tr. : **Up and down**
- 233 Chd. : **Legging**
- 234 Tr. : **Legging**
- 235 Chn. : Dede. ene nsam mm.
- 236 Tr. : eye obia ntena na afa. Obia ntena na afa na wɔn ye dii.
- 237 Chd. : Stop talking.
- 238 Tr. : Se wahunu. edin hunu enna yabub. Din hunu. edin a yede hye
nsem nkorenkore bi agyirae efa ne fa. ekyere se woka edin bia obi ehunu adee
pɔtii a woka ho asem. Se ebi n aboa. Se mo hunu se mo bub nboa beberee
din. Nboa no bi nso ewɔ din pɔtii. Nsoso se yeka wɔm nyinaa a wɔm gyina
ekuo baako. Wɔm nyinaa yefre wɔm a yebe kano sen? Nboa. Sɔ wahunu?
Baakofo ye beka no sen? Aboa. Se wɔm doɔso a yebe kano sen?
- 239 Tr.+Chn. : Nboa.
- 240 Tr. : Nkro. Yebe ka nkro beberee edin. Kumasi, Koforidua, ebi
kora se Accra. Accra ne Twi yeka no sen?
- 241 Chd. : **Knickers**
- 242 Tr. : **Knickers**
- 243 Chd. : Kaba
- 244 Tr. : Kaba
- 245 Chd. : Nkrae
- 246 Tr. : Nkrae. Nkrae. Wahunu. Aha. Afei ye, afe ye. Ye dii na tea.
Afei ye koɔso no. Yeka nipa, Ye nyinaa yeye den nea?
- 247 Chn. : Nnipa
- 248 Tr. : Nnipa se wahunu. Ha? ɔman, hwan na ebetmi aka ɔman
baako ma ma tea? ɔman. Mabel.
- 249 Chd. : Ghana
- 250 Tr. : Ghana ye ɔman. eye. Mo mm mo nsam ma no
- 251 Chn. : Nsam mm
- 252 Tr. : ɔman
- 253 Chd. : Kenya.
- 254 Tr. : Kenya ye ɔman. ɔman.
- 255 Chd. : Benin.

- 256 Tr. : Benin ye ɔman.
- 257 Chd. : Abrokyire
- 258 Tr. : Yee! ɔse Abrokyire.
- 259 Chn. : [Laughing]
- 260 Tr. : ɔman
- 261 Chd. : Burkina Faso
- 262 Tr. : Burkina Faso
- 263 Chn. : Nigeria.
- 264 Tr. : Nigeria.
- 265 Chn. : Algeria
- 266 Tr. : Algeria. Mo mmɔ mo nsam ma no.
- 267 Chn. : Nsam mmɔ ene dede.
- 268 Tr. : Se wahunu eye
- 269 Chn. : **Sir, sir.**
- 270 Tr. : eye. Obia enfa ne nsa ntohɔ. eye. Se wahunu. Nti se, nti se wo ka ɔman nea, ɔman beberee enna ewɔ he? enna ewɔ ewiase ha. Nti s wo ka ɔman nea, obia etumi nhunu dee woka. Yoo enna ye wɔ dua. Se wahunu? enne dee ekeka ho. Afei ye tuaso. Afei yebɛ ye edin pa.
- 271 Chn. : Kasa dede
- 272 Tr. : Seesei dee, seesei ye ahunu edin nkasa. Yese edin eye nsem bia yede hye nneema bi den? Agyirae. Y ahunu edin hunu. edin hunu so yese eye nneema bia, nsem bia yede hye nneema agyirae efa ne den? Seesei ye ekɔ edin pa. Nti edin pa kora, edin pa be ye den? Bofa.
- 273 Bofa : ebɔ
- 274 Tr.+Chn.: Wɔm esiri
- 275 Chn. : eha
- 276 Tr. : Bempa
- 277 Chn. : Bempa
- 278 Tr. : Ama
- 279 Chn. : Asiedu
- 280 Tr. : Asiedu
- 281 Chn. : Boatema
- 282 Tr. : Boatema eye
- 283 Chn. : Wɔn nyinaa ekasa
- 284 Tr. : eye. Ye dii. Ye dii natea
- 285 Chn. : Dede kasa
- 286 Chd. : **Keep quiet**
- 287 Tr. : Hwan na ede Kyei Nyarko? Kyei Nyarko!
- 288 Chn. : Wɔ ni.
- 289 Tr. : Wɔ no nkoa . Wahunu? eye din pa. Wahunu se me bɔ ye Kyei Nyarko nkoa na asɔreɛ
- 290 Chn. : Nti din paa ye baakofoɔ din?
- 291 Tr. : eye baako. Nti se wo kase Kyei Nyarko a, ehɔ a na wa yeden? Na wa sɔre agyina hɔ. obia enihɔ bio. eye din pa. Hwan na yefre no Asiedu?.
- 292 Chn. : Wa gyae sukuu

- 293 Tr. : Se wahunu se ye se Asiedu agyae sukuu? Wɔ no nkoa o! Afei eye.
Hwan na ebetumi abɔ nkro a eye din pa ma matea? Yekɔ ha aha ye nkro. Aha
ye nboa
- 294 Chn. : **Sir, sir, sir.**
- 295 Tr. : Aha ye, aha ye ɔman
- 296 Chn. : **Sir, sir, sir.**
- 297 Tr. : Aha ye nsuo.
- 298 Chn. : Kasa
- 299 Chd.. : esuofua.
- 300 Tr. : Asuofua. Ghana ha see se wo Kase Asuofua, obia nim se ewɔ
hene fa kwanso? Ye nyinaa yenka. ewɔ he ne fa kwanso? Asuofua ewɔ he ne
fa kwanso? ewɔ Barikesse kwanso.
- 301 Chn. : ewɔ Barikesse kwanso.
- 302 Tr. : Aha.
- 303 Chn. : [Kasa]
- 304 Chd. : Odumasi
- 305 Tr. : Ye dii
- 306 Chd. : Aprade
- 307 Tr. : Aprade
- 308 Chd. : Akwapim.
- 309 Tr. : Akwapim
- 310 Chn. : Akura ase
- 311 Tr. : Aei! Wɔse akura ase o!
- 312 Chd. : Adum
- 313 Tr. : Adum.
- 314 Chd. : Abɔɔm
- 315 Tr. : Abɔɔm
- 316 Chd. : Kumawu.
- 317 Tr. : Kumawu.
- 318 Chd. : Mankessim.
- 319 Tr. : Mankessim.
- 320 Chd. : Abrepɔ
- 321 Tr. : Abrepɔ
- 322 Chn. : [Kasa]
- 323 Tr. : Afei yahunu se edin huu ye aboa. Nti afei obia ebeka edin pa a
yebe nya afiri nboa mu. ehe!
- 324 Chd.. : Odwan.
- 325 Tr. : Wahunu se yeka odwan a obia enim odwan, me boa?
- 326 Chn. : **Yes sir.**
- 327 Tr. : Seesei ya yekase mo nkɔ kye odwan mbraa, hwan na ebekɔ
akɔ kye ɔsebɔ? Obiara bekɔ akɔ kyere odwan. ehe!
- 328 Chd. : Apɔnkye.
- 329 Tr. : Apɔnkye
- 330 Chn. : Adue
- 331 Tr. : Adue
- 332 Chd. : ɔsono

- 333 Tr. : ɔsono.
 334 Chd. : Nantwie
 335 Tr. : Nantwie.
 336 Chd. : Akaætea.
 337 Tr. : Aha!
 338 Chd. : Gyata.
 339 Tr. : Gyata.
 340 Chd. : ɔkraman.
 341 Tr. : ɔkraman.
 342 Chd. : Kɔntrofi.
 343 Tr. : Kɔntrofi. Mmo mmɔ mo nsam ma no.
 344 Chn. : Nsam mmɔ
 345 Tr. : Kɔntrofi.
 346 Chd. : Gyata
 347 Tr. : gyata.
 348 Chd. : Adue.
 349 Tr. : Adue
 350 Chd. : Abirekyie
 351 Tr. : Abirekyie
 352 Chn. : Akyinkyina
 353 Tr. : Akyinkyina.
 354 Chn. : Apɛtupere
 355 Tr. : ɛhɛ! Apɛtupere. ɛhɛ!
 356 Chn. : Bola bird
 357 Tr. : Bola bird
 358 Chn. : Dabudabu.
 359 Tr. : Dabudabu. Sɛ wahunu.
 360 Chn. : Dede kasa.
 361 Tr. : Obia, aboa bia ɛwɔ ne din. Nti sɛ woɛ sɛ wobɔ aboa bi din a,
 na ɛwɔse wobɔ ne din. ɔsebɔ, gyata, ɔkraman, ɔkra. Na ɛkyerɛ sɛ obia
 ahunu aboa korɔ a wo ka na sɛm
 362 Chn. : Dede kasa.
 363 Tr. : ɛha! Na yɛsɛ yɛ ka dɛn?
 364 Chd. : ɔman.
 365 Tr. : ɛhɛ!
 366 Chd. : Gabon.
 367 Tr. : Gabon.
 368 Chd. : South Africa
 369 Tr. : South Africa.
 370 Chd. : Ethiopia
 371 Tr. : Ethiopia
 372 Chd. : Britain
 374 Tr. : Britain
 375 Chd. : Kumasi
 376 Tr. : Wɔsɛ Kumasi
 377 Chd. : Wɔm nyinaa ɛsiri.



- 378 Chd. : Nkrae
 379 Tr. : Hein!
 380 Chn. : Nkrae
 381 Tr. : Nkrae!
 382 Chn. : Australia.
 383 Tr. : Australia
 384 Chn. : USA
 385 Tr. : USA
 386 Chn. : Japan
 387 Tr. : Japan
 388 Chn. : Sweden
 389 Tr. : Aha
 390 Chn. : Nkrae
 391 Tr. : K⊃
 392 Chn. : Algeria
 394 Tr. : Algeria
 395 Chn. : Uganda, Buganda
 396 Tr. : Uganda
 397 Chn. : Italy
 398 Tr. : Italy
 399 Chn. : Nigeria
 400 Tr. : Nigeria
 401 Chn. : Namibia
 402 Tr. : Namibia. Se wahu, se wahu? Wei nyinaa ya hunu se eye krobia,
 anna ⊃man bia wo be din a ebi enne wiase bebia. Na ekyere se eye den nea?
 eye din pa. Nti ya duru nsuo so. Aha
 403 Chn. : River Tano.
 404 Tr. : River Tano. Aha.
 405 Chn. : Ak
 406 Tr. : Ye⊃ aba twene ho. Aha.
 407 Chn. : Lake Bosomtwe
 408 Tr. : Lake Bosomtwe
 409 Chn. : Akosombo
 410 Tr. : Akosombo
 411 Chn. : Black Volta
 412 Tr. : Black Volta. Ye k⊃ aba dwene ho. Aha
 413 Chn. : Asase paynin
 414 Tr. : Asase paynin. Aha.
 415 Chn. : epo
 416 Tr. : epo
 417 Chn. : Lake Vic
 418 Tr. : Aha
 419 Chn. : Pra
 420 Tr. : Pra
 421 Chn. : Aprapo
 422 Tr. : Aprapo
 423 Chn. : Labika

- 424 Tr. : Labika
- 425 Chn. : etwe
- 426 Tr. : etwe. Sɛ wahunu? Aha.
- 427 Chn. : Subini
- 428 Tr. : Subini
- 429 Chn. : Wɔm nyinaa ɛsiri
- 430 Tr. : Aha.
- 431 Chn. : White Volta
- 432 Tr. : White Volta. Sɛ ahunu. Ne nyinaa yɛ frɛ no sɛn? Ne nyinaa yɛbɛ frɛ no sɛn?
- 433 Chn. : Nsuo
- 434 Tr. : ɛbio!
- 435 Chn. : Nsuo.
- 436 Tr. : Nsuo. Sɛ wahu s nsuo no, ɛɛ nsuo ɛyɛ deɛben din? Nsuo ɛyɛ deɛben din? ɛhɛ!
- 437 Chn. : Nsuo a yɛ nom.
- 438 Tr. : Nsuo ɛyɛ deɛben din?
- 439 Chn. : ɛyɛ din hunu.
- 440 Tr. : ɛyɛ din hunu Sɛ wo ka nsuo a ɛyɛ deɛben nea? ɛyɛ din hunu.
- 441 Chn. : Dede kasa
- 442 Tr. : **Stop that. Stop that. Leave her, leave her.** ɛdin pa ɛyɛ nsem bɛ a yɛde hyɛ nneɛma bi agyirae de kyere ade koro pɔtii. Din pa deɛ woka yɛ a, na obia ahunu. Nanso ɛdin hunu deɛ obia ɛntumi ɛnhunu. Nhoma dahɔ na me kase fa nhoma no brɛ me a. Nhoma, fa nhoma no brɛ me. ɛdeɛben nhoma na wobɛfa aba? Ahein.
- 443 Chn. : Mbɛ fa nhoma no nyinaa.
- 444 Tr. : Nhoma bia wobɛ fa biara ɛden nea? ɛyɛ nhoma. Na sɛ obi ba ha na wɔ kase fa **geography book** no ma me. Fa **history book** no ma me. Fa **science book** no ma me deɛ. Wobɛ fa den? **Science book, geography book,** ɛnna wobɛ fa ɛde aye den? ɛde akɔ ma no. ɛnne nneɛma mmeinu ɛnna ya sua ya. Ya sua ɛdin hunu ɛnna ya sua den?
- 445 Tr.+Chn.: Din pa.
- 446 Tr. : ɛ sua hunu s ɛdin hunu deɛ ɛyɛ nsembi a yɛde hyɛ nnema bi agyirae ɛfa ne fa. Yɛka a wo ntumi ɛnhunu no yiye. Yɛ kase ɛdin hunu a, ɛma wo tumi dwene bɛbree. Kofi, Kofi yɛ bɛbree ɛwɔ dan mu ha. Kro. nkro bɛbereɛ na ɛwɔ Ghana ha. Nti ɛyɛ a wo hunu yie **but** ɛdin pa de ɛy din ba yɛka ɛkyere wo adeɛ pɔɔtii noa wo kɔ yɛden? Wo kɔ yɔ. ɔwɔ, ɔkraman, ɔkra, Kumasi, Nkran. Ne nyinaa yɛ den nea? ɛyɛ din pa. **Bring the Twi exercise books.** Hwan na ɛwɔ asem bi bɛ bisa? Ase wo nte biribi aseɛ
- 447 Chn. : [Dede kasa]
- 448 Tr. : Sɔri hɔ. Obia nhyɛ aseɛ fɛfɛfɛ
- 449 Chn. : [Dede kasa].

APPENDIX 5(6) TB: English

LESSON : SIX
 TEACHER : "TB"
 CLASS : FOUR
 SCHOOL : ABORDFO SUKUU.
 SUBJECT : ENGLISH LANGUAGE: (READING COMPREHENSION)
 TOPIC : THE TWINS
 DATE : 14TH FEBRUARY, 1996

- 1 Tr. : What's the meaning of twins? Yes Anthony.
- 2 Anthony : A boy or girl which are born on the same mother and the same father.
- 3 Tr. : Anthony is telling us that twin simply means boy or girl who are born from the same mother. Who doesn't agree with Anthony? ehein!
- 4 Chd. : Because they are one.
- 5 Tr. : Because they are one. Yes
- 6 Chd. : Because they are twins.
- 7 Tr. : Because they are twins. I want to know the meaning of twins. What does twins mean? Yes..
- 8 Chd. : The same, the same people
- 9 Tr. : The same people. Yes.
- 10 Chd. : Both boys or girls.
- 11 Tr. : Both boys or girls. Philips.
- 12 Chd. : Which means their mother born them the day.
- 13 Tr. : Yes.
- 14 Chd. : **entaafu**.
- 15 Tr. : [Laughs]. **W se entaafu**. Yes. Clap for him.
- 16 Chn. : [Clapping].
- 17 Tr. : It means either two girls or two boys born from the same mother on the same day. Who is a twin here ? Oh I see. Thank you . What's your twin name?
- 18 Chd. : Atta Kakra.
- 19 Tr. : Atta Kakra. Sir what's your twin name?
- 20 Res. : Atta Panyin.
- 21 Tr. : Clap for them.
- 22 Chn. : [clapping].
- 23 Tr. : You see they are born on the same day by the same mother. That's why we have kakra and panyin. So. If you are going to read you will hear about Atta Panyin and Atta Kakra. Now look at the picture on page 43.
- 24 Chn. : Open to page 43.
- 25 Tr. : How many people do you see there?
- 26 Chn. : [Talking together].
- 27 Tr. : Barimah.
- 28 Barima : Three people
- 29 Tr. : Three people. You see three people. How many men and how many women do you see there?

30 Chn. : [Bid to answer]
 31 Tr. : Tifu
 32 Tifu : Two men one woman
 33 Tr. : Two men and then one woman. I don't know why they are there. But as you begin to read you will know why they are there.
 34 Chn. : [Talking together].
 35 Tr. : Turn to page 44. Page 44. What do you see there again? Page 44. Yes
 36 Chd. : I see some children
 37 Tr. : You see some children. How many of them? OD
 38 OD : Two
 39 Tr. : Two You see two children there. May be they are the twins you are going to read about. Yes.
 40 Chn. : [Talking together]
 41 Tr. : Now I want somebody to read.
 42 Chn. : Raise hands to bid.
 43 Tr. : He's just going to read small and then you will do some. Osei Barimah read. Listen very carefully.
 44 Osei B : A very long time ago there was a strong man. He married a beautiful woman. For a long time they had no children. The man and his wife went to a wise man's house. They said to the wise man, "We have no child. We want a child. Can you help us?" The wise man said, "Yes I can help you". He gave the woman some medicine. The medicine was very good. At.
 45 Tr. : Thank you. Now listen. I want to ask a question
 46 Chn. : [Talking together].
 47 Tr. : Who helped the man and his wife to have children? If you know just raise up your hand. I will come to you. You have not talked today. Talk,
 48 Chd. : The wise man helped the man and his wife to get a child.
 49 Tr. : The wise man helped the man and his wife to have children. Everybody.
 50 Chn. : The wise man helped the man and his wife to have children
 51 Tr. : Yes I want somebody to continue. Let me go to Angela. Angela to continue for us.
 52 Angela : After ten months the woman had a set of twins.
 53 Tr. : Listen very carefully oh! because after she has read I will ask some questions.
 54 Angela : They were both boys. They were called Atta Panyin and Atta Kakra. The twins grew up. Atta Panyin was handsome than Atta Panyin. But Atta Panyin was stronger than Atta Kakra.
 55 Tr. : Thank you. after the man had given the woman and the man some medicine. The wise man. After how many months did the woman give birth? Let me go to Aboagye.
 56 Aboagye: Ten months.
 57 Tr. : After
 58 Aboagye: Ten months
 59 Tr. : Clap for him

- 60 Chn. : [clapping]
- 61 Tr. : After ten months. And the woman gave twins to. She gave twins to two. Who are they? Let me go to Atefa
- 62 Atefa : Atta Panyin and Atta Kakra.
- 63 Tr. : Atta Panyin and Atta Kakra. But when they were born one was beautiful and the other was more beautiful. Who was more beautiful than the other? Let me go to Shadrak. Shadrak.
- 64 Shadrak : Atta Panyin was more beautiful than Atta Kakra
- 65 Tr. : He says Atta Panyin was more beautiful than Atta Kakra
- 66 Chn. : Sir, sir.
- 67 Tr. : You have not talked today. Talk
- 68 Chn. : Atta Kakra was more beautiful than Atta Panyin
- 69 Tr. : Atta Kakra was more beautiful than Atta Panyin
- 70 Chn. : Teacher, teacher
- 71 Tr. : No. Let us continue. Now listen very carefully. I am just going to read just a short passage. Listen very carefully. Their father liked Panyin more than he liked Kakra. Their mother liked Kakra more than she liked Panyin. kakra knew that his father liked him less than Panyin. Panyin also knew that his mother liked him less than Kakra. Now we have these two twins. We have Panyin and Kakra. The father liked which one?
- 72 Chn. : [Bid to answer by raising hands].
- 73 Tr. : I want somebody who has not talked today. Mabel.
- 74 Mabel : Their father liked Panyin more than Kakra.
- 75 Tr. : Their father liked what? Panyin more than Kakra. Which of them does the mother like? Barimah.
- 76 Barimah : Their mother liked Kakra more than she liked Panyin.
- 77 Tr. : Yes. Their mother liked Kakra more than she liked what? Panyin. Who can continue? Who can continue?
- 78 Chn. : Sir, sir.
- 79 Tr. : Let me go to Liticia. Continue. Everybody will read because everybody's voice will be heard here.
- 80 Liticia : One day they went to look for flowers. Both of them like flowers. They came to the, a junction. One of the roads went.
- 81 Tr. : We will continue. He said one day they went out to look for flowers and they came to a junction. /j-u-n-c-t-i-o- n/. They said they came to a junction. What is a junction? Yaw.
- 82 Yaw : **Nkwanta**
- 83 Tr. + Chn. : Laughter
- 84 Tr. : **Nkwanta Mmo, wa ye adeɛ.** What's a junction
- 85 Chd. : Station
- 86 Tr. : Station? Ehie!
- 87 Chn. : Sir, sir.
- 88 Tr. : What's a junction? Yes let me go to. What's a junction?
- 89 Chn. : **Bɛbia kai gyina**
- 90 Tr. : **Bɛbia kai gyina?**
- 91 Chn. : [Laughter and talking together].
- 92 Tr. : What's a junction?

- 93 Chn. : A place where cars park
- 94 Tr. : A place where cars park! BT
- 95 BT : **Bɛbia yɛ gyina fa kai.**
- 96 Tr. : Yaw.
- 97 Yaw : Bus stop.
- 98 Tr. : Bus stop. Yes. You have all done well. Let me explain. Yes I am going to draw some diagram on the board and with the diagram you will be able to understand. Look on the blackboard everybody.
- 99 Chn. : [Talking together].
- 100 Tr. : [Draws diagram on the board]. Now look on the board. Look on the board. This is the road. Accra to Kumasi road. Accra Kumasi. When you get here you branch to
- 101 Chd. : Sunyani
- 102 Tr. : Sunyani. Thank you. Clap for him
- 103 Chn. : [Clapping]
- 104 Tr. : Sunyani and then you can branch also to another place. This also can branch to another place. So this place. What is the name of this place? Yes
- 105 Chd. : The junction.
- 106 Tr. : The junction. Clap for him
- 107 Chn. : [Clapping]
- 108 Tr. : There is also another road coming this way. There is also another road going that way. This. What's the name of this place? Yes Beatrice.
- 109 Beatrice : Junction.
- 110 Tr. : Junction. So junction is not a station. Junction is not a place where cars do what? Park. But junction is the meeting place of what? I want somebody to frame that sentence Junction is the meeting place of what?
- 111 Chn. : [Talking together].
- 112 Tr. : Yes.
- 113 Chd. : The meeting place of the road.
- 114 Tr. : The meeting place of the road. Clap for him
- 115 Chn. : [Clapping].
- 116 Tr. : So as they were walking they came to a junction. Continue. Who can continue?
- 117 Chn. : **Mea, mea.**
- 118 Tr. : Mercy continue.
- 119 Mercy : Panyin said, "I will take the road to the right. Take the one on the left. We will meet here later. Let's see who will get more beautiful flowers". Later the two brothers met again at the junction. Panyin's flowers was, were beautiful. But panyin, but Kakra's flowers were more beautiful than Panyin's flowers.
- 120 Tr. : Thank you. As, as they were going! As they were going one of them took one road and the other took another. They were going. What were they. What were they going to look for? All of us.
- 121 Chn. : They were going to look for flowers.
- 112 Tr. : Yes. They were going to look for flowers. But when they came to this junction Atta Panyin took the Kumasi-Accra road and Atta Panyin also

took what? The Sunyani road. So they went out and they searched all and they got flowers and then they came to meet where? This junction again. The passage is very long. We will not be able to finish reading all the passage. So I want us to read silently and then I write some questions on the board and then you answer them. So read silently from paragraph one.” A very long time ago”. up to where they met at the junction. So from page 43 up to page 44.” One day they went to look for flowers. Both of them like flowers. came to a junction. One of the roads went to the left and the other went to the right. I want us to read up to the side. Read silently. If you are not. If you are not able to pronounce any word just raise your hand and I will come there. So read silently as I write the questions on the board.

- 123 Chn. : [Read silently: more of whispering than silent reading].
 124 Tr. : [Writes on the board].
 125 Chn. : [Murmur undertone as they read.]
 126 Tr. : You have five more minutes. After the five minutes then you will be allowed to answer the questions on the board.
 127 Chn. : [Continue reading in murmuring undertones]
 128 Tr. : Now heads up. Heads up. Who can read the first question? I want somebody who has not talked today
 129 Chn. : Sir, sir.
 130 Tr. : Let me go to
 131 Chn. : Raheal.
 132 Tr. : You mention your name
 133 Raheal : My name is Raheal Kwesi Adomako.
 134 Tr. : Raheal Kwesi hein!
 135 Raheal : Who helped a man and his wife to have children?
 136 Tr. : Who helped a man and his wife to have children? We are not going to answer that. Let me go to Mabel. Read number two. Mabel.
 137 Mabel : What were the names of the twins?
 138 Tr. : What were the names of the two children?
 139 Chn. : Sir, sir.
 140 Tr. : Let me go to Hearty
 141 Chn. : Jessica.
 142 Tr. : Jessica.
 143 Jessica : Which of the boys was stronger?
 144 Tr. : Which of the boys was stronger? The last question.
 145 Chn. : Sir, sir.
 146 Tr. : This girl has not talked today.
 147 Chn. : [Talking together].
 148 Chd. : Who was singing?
 149 Tr. : Who was singing? Now let us try to answer the fourth question. Who was singing? Let me go to Kyei Nyarko. Who was singing?
 150 Kyei : Kakra amid noise
 151 Chn. : [Talking together].
 152 Tr. : You see Kyei Nyarko has just raised up the hand. When I went there she said Kakra. Who was singing?
 153 Chd. : Their grandmother was singing

154 Chn. : [Laughing.]
 155 Tr. : Quiet. Their grandmother was singing. Let me go to Amos.
 Amos has not talked today. Yes.
 156 Amos : Atta Kakra was singing.
 157 Tr. : Atta Kakra was singing. Yes
 158 Chd. : Atta Kakra's bones
 159 Chn. : [Talking together]
 160 Tr. : Was Atta Kakra singing?
 161 Chn. : Yes, yes, No, no
 162 Tr. : Yes.
 163 Chn. : Atta Kakra's bones was singing
 164 Tr. : Atta Kakra's bones was singing. Everybody.
 165 Chn. : Atta Kakra's bones was singing.
 166 Tr. : Again
 167 Chn. : Atta Kakra's bones was singing.
 168 Tr. : Atta Kakra's bones was singing.
 169 Chn. : [Talking together]
 170 Tr. : Who doesn't understand what we are going to do?
 171 Chn. : [Talking together].
 172 Tr. : Hurry up. Is that the answer? Is that the answer?
 173 Chn. : [Working]

APPENDIX 5 (7) TC: English

LESSON : SEVEN
TEACHER: "TC"
CLASS : FIVE
SCHOOL : ABORFO SUKUU
SUBJECT: ENGLISH LANGUAGE (READING COMPREHENSION).
TOPIC : MRS APIA'S KITCHEN GARDEN
DATE : 12TH FEBRUARY, 1996.

- 1 Tr. : Last week we read lesson eleven so today we want to read lesson twelve. Eh, that's Mrs Apeas' kitchen garden. So before then shall we go through, first the key words. So I'm reading the key words for you. So you listen to what I am reading to you. Okay, secondary school.
- 2 Chn. : Sec.
- 3 Tr. : Secondary school, kitchen garden, wooden box, germinated, piece of land, harvesting. So, read after me. Secondary school.
- 4 Chn. : Secondary school.
- 5 Tr. : Again.
- 6 Chn. : Secondary school.
- 7 Tr. : Kitchen garden.
- 8 Chn. : Kitchen garden.
- 9 Tr. : Again.
- 10 Chn. : Kitchen garden.
- 11 Tr. : Wooden box.
- 12 Chn. : Wooden box.
- 13 Tr. : Again.
- 14 Chn. : Wooden box.
- 15 Tr. : Germinated.
- 16 Chn. : Germinated.
- 17 Tr. : Again.
- 18 Chn. : Germinated.
- 19 Tr. : Piece of land.
- 20 Chn. : Piece of land.
- 21 Tr. : Again.
- 22 Chn. : Piece of land.
- 23 Tr. : Harvesting.
- 24 Chn. : Harvesting.
- 25 Tr. : Again.
- 26 Chn. : Harvesting.
- 27 Tr. : I want somebody to come to the board and read through the words. Chd.1
- 28 Chd.1: Secondary school, kitchen garden, wooden box, germinated, piece of land, harvesting
- 29 Tr. : Here is germinated say it.
- 30 Chd.1: Germinated
- 31 Tr. : Clap for her.

- 32 Chn. : [Clapping].
- 33 Tr. : Chd.59 Chd.2.
- 34 Chd.2: Secondary school, garden.
- 35 Tr. : Not chicken garden. It's kitchen garden.
- 36 Chd.2. : Chicken garden.
- 37 Tr. : Again.
- 38 Chd.2: Kitten garden.
- 39 Tr. : Kitchen garden.
- 40 Chn. : [Talking together].
- 41 Chd : Keep quiet.
- 42 Chd.2: Kitten garden, wooden box, germinated, piece of land, harvested
- 43 Tr. : You have done well. Sit down.
- 44 Chn. : Clap for him
- 45 Tr. : [Clapping].
- 46 Chn. : Yes Chd.3.
- 47 Tr. : [Talking together].
- 48 Chd.3.: Kitchen garden, wooden box, piece of land, germinated , harvesting.
- 49 Chn. : Sir, sir.
- 50 Tr. : I want only two Chn to read. Then Eh, while they are reading you Eh, have to say after them. One boy one girl.
- 51 Chn : Sir, sir, sir.
- 52 Tr. : Chd.4. I do not want to hear sir, sir, sir. All of you want to read why?
- 53 Chd.4: Secondary school.
- 54 Chn : Secondary school.
- 55 Chd.4: Kitchen garden.
- 56 Chn. : Kitchen garden.
- 57 Chd.4: Wooden box.
- 58 Chn. : Wooden box.
- 59 Chd.4: Germinated.
- 60 Chn. : Germinated.
- 61 Tr. : Piece of land.
- 62 Chn. : Piece of land.
- 63 Chd.4: Harvesting.
- 64 Chn : Harvesting.
- 65 Chn. : [Clapping].
- 66 Tr. : He! if somebody is reading you should not raise up your hand. It means one is reading. What do you want? Let that person finish. Chd.1
- 67 Chd.1: Secondary school.
- 68 Chn. : Secondary school.
- 69 Chd.1: Kitchen garden.
- 70 Chn. : Kitchen garden.
- 71 Chd.1. : Wooden box.
- 72 Chn. : Wooden box.
- 73 Chd.1. : Germinated.

- 74 Chn : Germinated.
- 75 Chd.1: Piece of land.
- 76 Chn. : Piece of land.
- 77 Chd.1. : Harvesting.
- 78 Chn : Harvesting.
- 79 Tr. : Clap for her.
- 80 Chn. : [Clapping].
- 81 Tr. : So I want to explain the whole thing on the board. So Eh, secondary school what does it mean? Yes Chd.4.
- 82 Chd.4: It is a school.
- 83 Tr. : You have said something. It is a school but primary school is also a school. But Eh, a training college is also a school. But the topic is secondary school. Yes Chd.5.
- 84 Chd.5: It is a school when you are from primary school or JSS you went to secondary school.
- 85 Tr. : Okay, Eh, she is saying that it's a school after finishing JSS you have to move to what?
- 86 Tr+Chn. : Secondary school.
- 87 Tr. : Okay, but nowadays we have Junior secondary school and senior secondary school. Junior secondary school is after finishing primary school you go to where?
- 88 Chn. : JSS
- 89 Tr. : JSS means.
- 90 Chn. : Junior secondary school
- 91 Tr. : Okay, Eh, I want somebody to use it in a sentence.
- 92 Chd : When my brother finished JSS he went to secondary school
- 93 Tr. : You said JSS. I want a full name for JSS. May be I don't know the full name for JSS. Say it again. Say the sentence you said again.
- 94 Chd. : When my brother finished the Junior secondary school he went to the secondary school.
- 95 Tr. : He went to.
- 96 Chn. : Senior
- 97 Chd. : Senior secondary school
- 98 Tr. : Clap for her.
- 99 Chn : [Clapping].
- 100 Tr. : Chd 37 Chd.6.
- 101 Chd.6: My brother is in senior secondary school
- 102 Tr. : Yes, say. Okay all of you have done very well. Kitchen garden, kitchen garden. What does it mean? Kitchen garden. Chd.7
- 103 Chn. : [Talking together].
- 104 Tr. : Yes, what does it mean?
- 105 Chd.7: May be you have done a farm in your house. **ενοα nono.**
- 106 Tr. : Chd.7 you have done well. Is that. Yes Chd.21.
- 107 Chn. : Kitchen garden is where we plant the things
- 108 Tr. : Well you have done all you can. Chd.3.
- 109 Chn. : Kitchen garden is where we plant vegetables

- 110 Tr. : Okay, you said where we plant vegetables. May be I have my farm at Kwadaso and I am also staying here. Then moving from this side up to Eh Asuyeboah. May be that place I have planted all types of vegetables. Is it kitchen garden?
- 111 Chn : No sir.
- 112 Tr. : He! So Eh, who can give us a clear meaning of kitchen garden?
- 113 Chn. : Is a garden which we plant at the back of our houses.
- 114 Tr. : Okay is correct. Ehein! Chd.4 the last one.
- 115 Chd.4: It means if you have a piece of land at the back of your house the things you grow there
- 116 Tr. : You should speak louder
- 117 Chd.4: It means if you have a piece of land.
- 118 Chd. : Speak louder
- 119 Tr. : Hay! Allow him to talk.
- 120 Chd.4: If you have a piece of land at the back of your garden then you plant something there that is, that is a kitchen garden.
- 121 Tr. : Okay Eh, may be we have Eh. that is if Eh, this class is our farm. Then we have a piece of land like where we have planted what? The grass or the flowers. So for that place we can what? We can make a farm there. Growing what? All kinds of vegetables. So that one we can term as what? Kitchen garden. Okay yes, I want somebody to use it in a sentence.
- 122 Chn. : [Talking together].
- 123 Tr. : Chd.8 Kwarteng
- 124 Chd.8: My mother's kitchen garden is behind her house.
- 125 Tr. : Good. Clap for her.
- 126 Chn. : [Clapping]
- 127 Tr. : Yes, always the girls. Apart from the girls it's Chd.4. But the rest of you what are you doing? Yes Chd.9 I want you to talk.
- 128 Chd.9: My mother.
- 129 Tr. : Speak louder.
- 130 Chd.9: My mothers kitchen garden is very big.
- 131 Tr. : Mhum, your mother's kitchen garden is very big. Okay, clap for him.
- 132 Chn : [Clapping].
- 133 Tr. : The next one, wooden box. All of you say it.
- 134 Chn : Wooden box.
- 135 Tr. : What does it mean? Chd.5
- 136 Chd.5: It is a box made by wood or a box which we put young plants in.
- 137 Tr. : I will take the first one or all of them will be correct. But the moment we say wooden box it means that Eh, a box made of what?
- 138 Tr+Chn.: Wood.
- 139 Tr. : We use it for what? Yes
- 140 Chn : We use it for planting vegetables.
- 141 Tr. : Okay for planting vegetables. That is seedlings, seedlings. Plant what? Seeds. Okay. Yes somebody should use it in sentence. Wooden box. Ann Chd.10.

- 142 Chd.10: I have a big wooden box.
- 143 Tr. : At where?
- 144 Chd.10: At Tema.
- 145 Tr. : At Tema. (laughs)
- 146 Chn : [Laughing].
- 147 Tr. : Hay! Don't laugh. What? [teacher laughs]. Yes it is correct.
Why are you laughing? Why are you laughing?
- 148 Chn. : [Still laughing].
- 149 Tr. : Yes, Chd.11.
- 150 Chd.11.: My father nests the little plants in the little wooden box.
- 151 Tr. : Correct, clap for her.
- 152 Chn. : [Clapping].
- 153 Tr. : Okay the next thing germinated. All of you say it.
- 154 Chn. : Germinated.
- 155 Tr. : Again.
- 156 Chn. : Germinated.
- 157 Tr. : What does it mean? Yes Chd.12.
- 158 Chd.12: When you plant when you something here and you are
germinating it to the other side.
- 159 Tr. : **Hee!** You are germinating it to the other side. Good. That is
transplanting but not germinated. Yes somebody should tell me the meaning
of what? Eh, germinated.
- 160 Chn. : Sir.
- 161 Tr. : Okay, Chd.4 you try.
- 162 Chn. : The growth of a plant.
- 163 Tr. : Okay, he said the growth of a plant. Okay. lets say if we are
making a farm, then today we plant Eh, lets say maize. Within three or four
days time you go and see that Eh there are something which is moving out
from what?
- 164 Chd. : Ground.
- 165 Tr. : From the ground. So Eh, what's, what is coming from the
maize upwards the ground is what? Germinate. You can say that the maize
are what? Germinate. The verb is what? Germinate. Then Eh, germinated
means Eh all the seeds are what? Coming up. Okay, then let us move on to
piece of land, piece of land. All of you say it.
- 166 Chn : Piece of land.
- 167 Tr. : Again.
- 168 Chn. : Piece of land.
- 169 Tr. : What does it mean? Chd.8 Kwarteng.
- 170 Chn : It means that if you have, if you have a
- 171 Tr. : Okay you can say that in a sentence.
- 172 Chd.8.: Like my mother has a piece of land, a piece of land at her home
town.
- 173 Tr. : Yes. Clap for her.
- 174 Chn. : [Clapping].
- 175 Tr. : She is saying that her mother has what? A piece of land at her
hometown. Yes any example? Chd.7. You should speak louder.

- 176 Chd.7: I have a small piece of land.
- 177 Tr. : Mum. You have said something. At where? Yes at where?
- 178 Chn : At where.
- 179 Tr. : At where.
- 180 Chd.7: At Kwahu.
- 181 Tr. : At Kwahu. Good. Clap for her.
- 182 Chn : [Clapping].
- 183 Tr. : Okay then harvesting. All of you say it.
- 184 Chn. : Harvesting.
- 185 Tr. : Again.
- 186 Chn. : Harvesting.
- 187 Tr. : Yes, Chd.13 next time you will talk.
- 188 Chn : [Talking together].
- 189 Chd.13: Harvesting
- 190 Tr. : Yes
- 191 Chd.13.: I harvest the beans for five days.
- 192 Tr. : I harvest the beans for five days! That harvest is what? That verb is what? Everyday,, but what you are saying it means that you have done it already. So say that in sentence again. What is the past tense of harvest? You don't know? Help her.
- 193 Chd : Harvested.
- 194 Tr. : Harvested. So use harvested to form the sentence.
- 195 Chd.13.: They harvested the beans.
- 196 Tr. : They have harvested the what? The beans. Yes Chd.19.
- 197 Chn. : When the mango was ripe I harvested them.
- 198 Tr. : I harvested them. Okay. You have done well. All of you have done well. So shall we go through the new words again. Points to the word twice on the bb.
- 199 Chn : Secondary school.
- 200 Tr. : [Points to a word on the bb].
- 201 Chn. : Secondary school.
- 202 Tr. : [Points to another word on the bb].
- 203 Chn : Kitchen garden.
- 204 Tr. : [Points to the next word on the bb].
- 205 Chn. : Kitchen garden.
- 206 Tr. : [Points to the word on the bb].
- 207 Chn. : Wooden box.
- 208 Tr. : [Points to the word on the bb].
- 209 Chn : Wooden box.
- 210 Tr. : [Points to the next word on the bb].
- 211 Chn. : Germinated.
- 212 Tr. : [Points to the word on the bb].
- 213 Chn : Germinated.
- 214 Tr. : [Points to the next word on the bb].
- 215 Chn. : Piece of land.
- 216 Tr. : [Points to the word on the bb].
- 217 Chn : Piece of land.

- 218 Tr. : [Points to the next word on the bb].
- 219 Chn. : Harvested.
- 220 Tr. : [Points to the word on the bb].
- 221 Chn. : Harvested.
- 222 Tr. : Okay, then take your English reading books.
- 223 Chd. : Unit twelve, Mrs Apeas kitchen garden. Mr. Apea and his family live in Kumasi. Mr Apea teaches at the city secondary school. The Apea, Mr Apea. The Apeas
- 224 Tr. : The Apeas live in a house at one end of the school compound.
- 225 Chd. : There is a piece of land near the house. For a long time people were throwing rubbish on this piece of land. One day Mrs. Apea told her husband, 'We must do something useful on this land. If we do it people will no longer throw rubbish on it.
- 226 Tr. : Stop.
- 227 Chd. : All family helped there, to prepare the
- 228 Tr. : Not there.
- 229 Chd. : Mr. Apea said, 'That will be good. I think we should make a garden on it. We can grow vegetables in the garden'. When Mr. Apea came home the next day, he and his two sons cleared the land. They used machetes and hoes for the work. After
- 230 Tr. : About
- 231 Chd. : After about one week Mr. Apea burnt the weeds and the rubbish. Then the whole family helped to prepare the land. They turned the soil over and made many little beds. Mrs. Apea brought some vegetable seeds. She brought the seeds of tomatoes, pepper, okra, garden eggs and onions. Mr. Apea made little boxes from pieces of wood. He put some black soil into the boxes. Then Mrs. Apea nursed the seeds in the boxes. The children put water on the seeds in the boxes every morning and evening.
- 232 Tr. : Stop.
- 233 Chd. : All these time Mr. and Mrs. Apea were working on the beds. In a few days the seeds in the boxes, and, had germinated. They became, they became little plants. Soon the pot was ready Mr. and Mrs. Apea planted the little plants on different beds. The children continued to put water on the little plants every morning and evening. Very soon the vegetables are growing well.
- 234 Tr. : Stop.
- 235 Chd. : One evening Adu the elders child told his parents,, 'I think we should grow plantain cassava and cocoyam too. This soil is good and they will grow very well. We have not made any beds there.
- 236 Tr. : Stop.
- 237 Chd. : Mr. and Miss. Apea.
- 238 Tr. : Mr. and Mrs.
- 239 Chd. : Mr. and Mrs. Apea liked what their son have, what their son said. They made the plot ready for planting the crops. They got ten suckers of plantain, some cassava sticks and cocoyam /rizooms/ (rhizome).
- 240 Tr. : Rhizome /raizooms/

- 241 Chd : Rhizome from a farmer. They dug some holes and put one plantain sucker into each. The children cut the cassava sticks. They put one stick into a hole. Then they cut each cocoyam rhizome into three or four pieces. They put one piece into a mound and covered it with soil.
- 242 Tr. : Stop.
- 243 Chd : Mrs Apea worked in the garden when her husband and the children were away at school. She weeded the land with either a hoe or a machete. When her husband and the children came from school they helped her. Each person was given some vegetable beds to look after. Chd.18ua
- 245 Tr. : To look after.
- 246 Chd : Looks after. Chd.18ua the youngest child looked after the two seed beds of pepper. Chd.11 had two beds of okra. Ohene was given four beds of tomatoes. Adu looked after the onions. Mrs Apea looked after the garden eggs and Mr Apea looked after the other crops.
- 247 Tr. : Stop.
- 248 Chd : After some time the vegetables were ready for harvesting. Every one harvested the vegetables on his or her beds. There were plenty of fresh vegetables. Mrs Apea and her daughter used some of the vegetables for food. They sold some of the vegetables and gave some to their chil, their friends too. Mr Apea and his family were very happy that they had grown their own vegetables in their own kitchen garden. They were proud of their vege, they were proud of their garden. They continued to work on the land and grow more vegetables, plantain, cocoyam, cassava and fruits.
- 249 Tr. : Okay all of you have done well so this time I want each of you to read silent, to read or silent in his or his mind. After that I will ask you some questions. So silent reading. We just learn meanings and how to pronounce the words too. So read silent in your heads. Silent reading.
- 250 Chn : [Talking together]
- 251 Tr. : [Inaudible].
- 252 Chd : Stop talking.
- 253 Tr. : Chd.14.
- 254 Chd.14: Mr Apea teaches at the city secondary school.
- 256 Tr. : You are correct clap for her.
- 257 Chn : [Clapping].
- 258 Tr. : Who was the oldest son? Chd.15.
- 259 Chd.15: Adu was the oldest son.
- 260 Tr. : Correct. Clap for him.
- 261 Chn : [Clapping].
- 262 Tr. : We use cocoyam seeds to plant. True or false. Chd.9
- 263 Chd.9: False.
- 264 Tr. : Correct. Clap for him.
- 265 Chn : [Clapping].
- 266 Tr. : What we use to grow cocoyam. Chd.16
- 267 Chd.16: Rhizomes.
- 268 Tr. : Correct. Clap for her.
- 269 Chn : [Clapping].

- 270 Tr. : Give the name of Mr. and Mrs. Apeas' children. They were how many? Patient, Chd.17.
- 271 Chd.17: Four.
- 272 Tr. : Is it true?
- 273 Chn : Yes/No, Yes/No. Yes.
- 274 Tr. : Hey okay. Lets know them. Yes. Eh Chd. 18. name one of them. Chd.18 Yes.
- 275 Chd.18 : Chd.11
- 276 Tr. : Chd.11
- 277 Chd : Teacher sir.
- 280 Tr. : Yes.
- 281 Chd : Adu.
- 282 Tr. : Adu, yes.
- 283 Chd : Ohene.
- 284 Tr. : Ohene, then who again?
- 285 Chd : Finish.
- 286 Tr. : So this means that they were what?
- 287 Chn : Four.
- 288 Tr. : Okay, they should grow plantain, cassava, and cocoyam. Who said it? Chd.19.
- 289 Chd.19: Adu said they should grow plantain, cassava and cocoyam.
- 290 Tr. : Adu said. Correct. Clap for her.
- 291 Chn : [Clapping].
- 292 Tr. : What did the Apeas find on the land near their house?
- 293 Chn : [Talking together].
- 294 Tr. : You are looking at my face. I am saying that what did the Apeas find on the land near their house?
- 295 Chd : They found rubbish on the land.
- 296 Tr. : You should speak louder. You know, as if there is something wrong with you. You should speak louder. Yes Chd.20.
- 297 Chd.20: They found a piece of land near their house.
- 298 Tr. : They found it. There was something on the land. What thing?
- 299 Chd.20: They were throwing rubbish there.
- 300 Tr. : They found rubbish there. Okay. Eh, what did Mrs. Apea and the girls do with the vegetables from their garden? Chd.21.
- 301 Chd.21: They removed the vegetables from the garden.
- 302 Tr. : Is it true? Yes Chd.5.
- 303 Chd.5: They sold some of the vegetables. Eat some and give some to their friends.
- 304 Tr. : Correct. Clap for her.
- 305 Chn : [Clapping].
- 306 Tr. : Give the name of vegetables the grew on beds. Chd.22.
- 307 Chd.22: Peppers.
- 308 Tr. : Is it only pepper? Yes.
- 309 Chd : No.
- 310 Chd : Okra.
- 311 Tr. : Have I asked you anything?

- 312 Chd : Sir.
- 313 Tr. : Yes Chd.23.
- 314 Chd.23: Garden eggs.
- 315 Tr. : Garden eggs. Chd.14.
- 316 Chd : Tomatoes.
- 317 Tr. : Yes.
- 318 Chd : Onions.
- 319 Tr. : Is it all?
- 320 Chn : No
- 321 Tr. : Then others. Okay. Eh so I want somebody to say on his or her own words in a short sentence or sentences on what we have read. Yes all you have read is talking about what? Yes Chd.5.
- 322 Chd.5: All what we have read is talking about how to make a farm.
- 323 Tr. : She has said something. How to make a farm. She has said it. Yes any contribution?
- 324 Chd : How Mr. and Mrs. Apea deal with their piece of land.
- 325 Tr. : You are correct. Yes Chd.7.
- 326 Chd : We have learnt how to plant vegetables.
- 327 Tr. : Yes again.
- 328 Chd : We have known what we use to grow cocoyam.
- 329 Tr. : Okay. what we use to grow what? Farm crops like vegetables or plantain and so on and so forth? Okay so shall we read again for us to do the exercises?

Appendix 5 (8) TC: Science

LESSON : EIGHT
TEACHER: "TC"
SCHOOL : ABOR-FO SUKUU.
CLASS : FIVE
SUBJECT: ELEMENTARY SCIENCE.
TOPIC : LIQUIDS THAT MIX
DATE : 8TH FEBRUARY, 1996.

- 1 Tr. : We have different kinds of liquids as you have learnt. So I want you to give me some examples of the liquids. Chd.26.
- 2 Chd.26: Kerosene.
- 3 Tr. : Kerosene. Kerosene is one. Any more example? Chd.24?
- 4 Chd.24.: Water.
- 5 Tr. : Correct. Chd 27.
- 6 Chd 27 : Fanta.
- 7 Tr. : Fanta. Okay I do not want to hear sir, sir, sir. Chd 27
- 8 Chd 27: Palm oil
- 9 Tr. : Palm oil. Okay, all what you have said is true. So they are all what?
- 10 Chn. : Liquids.
- 11 Tr. : Kinds of what?
- 12 Tr+Chn.: Liquids
- 13 Tr. : Eh, are all the liquids the same?
- 14 Chd. : No.
- 15 Tr. : Have I asked you anything? I am asking all of you. So if you know the answer you raise up your hand. All the liquids are the same. True or false? Yes Chd.25.
- 16 Chd.25 : False.
- 17 Tr. : Correct. All the liquids are not the same. There are different types of what? Liquids. Eh, some have colours. Others are not what?
- 18 Chn. : Coloured.
- 19 Tr. : Coloured. or they are colourless. Then others too have smell either pleasant or eh bad smell. Okay I want you to give me examples of liquids which have, eh which has colours. Yes what are some of the liquids? Chd.11.
- 20 Chd.11.: Fanta.
- 21 Tr. : Fanta. Yes
- 22 Chd. : Milk.
- 23 Tr. : Milk. Yes.
- 24 Chn. : Coke.
- 25 Tr. : Then etceteras. The others. What are some of the liquids which, which are colourless? Yes Chd 29.
- 26 Chd 29: Petrol.
- 27 Tr. : Petrol. I think petrol is not colourless. Yes I think it has colours in it. Yes Chd 38.

- 28 Chd 38: Palm oil.
- 29 Tr. : Palm oil. Eh, No. Yes.
- 30 Chd. : Oil.
- 31 Tr. : What kind of oil? There are so many types of oil Yes. Chd 31.
- 32 Chd 31.: Water.
- 33 Tr. : Water. Yes. Then what again?
- 34 Chn. : Kerosene
- 35 Tr. : Kerosene. Okay These are some of the liquid which you, eh which are colourless. Okay, so we have seen the different types of what? Liquids. Then we can also talk about eh, characteristics of eh, liquids. That is what the liquids, eh behaves. How the liquids are. All of you here have what? Different characters. So as it is for liquids. They also have what? Characteristics. Who can tell me no of the characteristics of liquids? I want the liquid behave. Yes Chd.5 speak louder.
- 36 Chn. : For petrol, petrol you don't drink it has bad smell.
- 37 Tr. : Mum, you have said bad smell. That's okay I am giving you one example. That is liquids flow. All liquids what?
- 38 Chn. : Flow.
- 39 Tr. : Yes, all liquids flow. There is also they take the shape of their containers. So lets say if we have water in this beaker. Then if you put it in another container. It will take the shape of that what? That container. Okay. Then we are also saying that eh, it became or it become light when heated. For example, eh palm oil when you put it to the fire, it becomes what? Light. Okay, so, I know that this is what we know. First eh, that's the kind of liquid. So I want today, we want to move to eh, mixing liquids. We know that some of the liquids mix. This is the, our main topic for today. So we have revised what we know about the liquids. That is we have seen kinds of liquids. What the liquids look like. That is characteristics of what? Liquids. So today we are moving on to see what liquids do mix. And then what? Liquids which do not mix. Okay. So bring all the liquids you brought in front of the class. You do it in groups.
- 40 Chn. : [Send their liquids to the teacher's table.]
- 41 Tr. : But look at what you have brought. Is just a few. If all of you brought one then we have what? To be in groups so that each of the groups will know what we are going over. Since they are few I have to do the activity and you will what? Watch me. At times I will invite some of you to come and do some of what? Some of the activity. Okay, So let's mention the liquids we have here. Don't mention any liquid which is not here. Because we cannot what? Do the experiment. We want to find eh, I want you to mention only the liquids here. Chd.42
- 42 Ama : Oil.
- 43 Tr. : What kind of oil? Eh Chd 32.
- 44 Chd 32: Dinnor
- 45 Tr. : But what type of oil is this Dinnor? Okay lets take it because nobody brought palm oil or palm kernel oil so lets take as cooking oil. But apart from this, we have, What is this? I think this one, both of them are the same. What about this one?

- 46 Chn. : Frytol oil
- 47 Tr. : Frytol oil [shows another container up]
- 48 Chn. : Dinnor.
- 49 Tr. : Okay, so eh, we shall do dating. What about this? Is the same oil?
- 50 Chn. : [Talking together].
- 51 Tr. : Okay, so lets take cooking oil.
- 52 Chn. : [Talking together].
- 53 Tr. : But what again. Chd.21
- 54 Chn. : Squash
- 55 Tr. : [Searches for the squash on his table]
- 56 Chn. : The red one. The red one.
- 57 Tr. : This one.
- 58 Chn. : Yes
- 59 Tr. : Okay, squash. So we shall put it here. What about this?
- 60 Chn. : Refresh.
- 61 Tr. : What about this?
- 62 Chn. : Kerosene
- 63 Tr. : Then this one.
- 64 Chn. : Kerosene, oil, oil.
- 65 Tr. : Okay. Chd.14 what is this?
- 66 Chn. : Oil.
- 67 Tr. : Then this one. I think all of you know it. Malt
- 68 Chn. : Malt.
- 69 Tr. : Then this one.
- 70 Chn. : [Talking together].
- 71 Tr. : Then we have, 1, 2, 3, 4, 5 then water. We have only six what? Liquids. There are so many types of liquids but you have only brought this ones.
- 72 Chn. : [Talking together].
- 73 Tr. : Yes you have to bring one but
- 74 Chn. : [Talking together].
- 75 Tr. : You have seen the liquids you brought. So we want to see which of them do mix. And which of them do not mix. So, hey, fortunate we shall use this sign for those who do mix. Okay, we know that water and water they are all what? The same. So shall we start with water and cooking oil? Who will come and perform that activity for us? Okay I am doing one for you. We have water here then the cooking oil.
- 76 Chn. : [Talking together].
- 77 Tr. : I am going round, so you check it. After that I will ask you questions on it.
- 78 Chn. : [Calling each other] Serwah Nkrumah.
- 79 Tr. : What do you observe from this activity. Yes Chd 32.
- 80 Chd 32.: It does not mix.
- 81 Tr. : It does not mix. So since eh, since eh, water and cooking oil do not mix we shall mark here as what?
- 82 Chn. : Do not.

- 83 Tr. : Okay, so I want somebody to come and do the activity of water and refresh.
- 84 Chn. : [Raise hands to bid].
- 85 Tr. : Chd.5 come and try.
- 86 Chn. : Joy, Joy.
- 87 Chd.5. : [Goes to teacher's table].
- 88 Chn. : [Talking together]
- 89 Tr. : **Yi firi mu.** That you should bring them for what? Activity, but nobody wants us to use his or hers.
- 90 Chd.5. : [Pours water into a container of refresh]
- 91 Chn. : Sir, sir, sir.
- 92 Tr. : He! Okay who wants to use, eh who wants us to use his or hers.
- 93 Chn. : **Wo tiri mu wɔ den paa** [amid talking together].
- 94 Tr. : [Inaudible].
- 95 Chn. : [Talking together].
- 96 Tr. : **Eh Austin wo aye adeε paa.** Eh what is yours?
- 97 Chn. : Sir, sir, sir and [Talking together].
- 98 Tr. : No, no. I want the refresh.
- 99 Chn. : [Talking together].
- 100 Tr. : Eh, Jacquelyn.
- 101 Jacquelyn: Sir.
- 102 Tr. : Shall we use yours?
- 103 Chn. : [Talking together].
- 104 Tr. : Okay bring it.
- 105 Jacquelyn: [Takes refresh to teacher's table].
- 106 Tr. : He put it here.
- 107 Chn. : [Talking together].
- 108 Chd.5: [Shows mixture of water and refresh to teacher]
- 109 Tr. : Are they mixed or not?
- 110 Chn. : Not mixed, mixed, mixed, mixed.
- 111 Tr. : Am say that if am not ask you told, tell me anything. Yes Chd.27.
- 112 Chd.27: According to mixture.
- 113 Chn. : [Laughing].
- 114 Tr. : Okay, eh, since they are both liquids we can say. They have what? Mixed.
- 115 Chn. : [Talking together].
- 116 Tr. : So, those who mix we use what?
- 117 Chn. : Three.
- 118 Tr. : Three.
- 119 Chn. : Oh sir, oh sir.
- 120 Tr. : Okay, carry on because some of the liquids if they mix together.
- 121 Chn. : [Talking together].

- 122 Tr. : Hey! If they mix together and you drink it you will be in trouble. So don't make an attempt to drink liquids, some of the liquids when mixed together.
- 123 Chn. : [Talking together].
- 124 Tr. : Okay, no, no.
- 125 Chn. : [Talking together].
- 126 Tr. : Sit down, sit down.
- 127 Chn. : Sir, sir.
- 128 Tr. : Eh lets clear ourselves from this activity
- 129 Chn. : Sir, sir
- 130 Tr. : Yes, Chd.7.
- 131 Chd.7.: They do mix.
- 132 Tr. : They do mix. They do mix. Water?
- 133 Chn. : [Talking together].
- 134 Tr. : Then kerosene and water.
- 135 Chn. : Sir, sir, sir.
- 136 Tr. : Kerosene and water. You sit down. **Wo dee fato hɔ**. I hate sir, sir. You sit down
- 137 Chn. : Sir, sir [Talking together]
- 138 Tr. : Water and kerosene.
- 139 Chn. : [Talking together].
- 140 Tr. : Chd 36
- 141 Chn. : [Talking together].
- 142 Tr. : Eh, you, eh you all know that eh when you bring it you are coming to give it to me to drink. But you are coming to use what? for the activity. You have brought Fanta but you are telling me that your mother eh your mother say that you have to what?
- 143 Chn. : Bring it back
- 144 Tr. : No because we have to do the activity. **enka se wo yire firie**. No not at all. Okay, so they do not mix. Water and kerosene do not what? Mix
- 145 Chn. : [Talking together].
- 146 Tr. : Okay Chd.21
- 147 Chd.21: Sir
- 148 Tr. : Come and perform this activity for us.
- 149 Chn. : Oh! Noise.
- 150 Tr. : Squash and water
- 151 Chn. : [Talking together].
- 152 Tr. : You watch her. Ko Asare what do you see?
- 153 Chn. : They have mixed
- 154 Tr. : They do mix. They do mix
- 155 Chn. : [Talking together].
- 156 Tr. : EmChd.2eh, Chd 30. Water and cooking oil
- 157 Chd 30: [Pours the two into the same container and observes]
- 158 Tr. : They do not mix. So have water and cooking oil dee. You know that what? They do not mix. Lets see the we eh, the cooking oil and cooking oil. They are all the same. Okay lets see cooking oil and refresh

- 159 Chn. : Sir, sir.
- 160 Tr. : Cooking oil and refresh
- 161 Chn. : Sir, sir.
- 162 Tr. : Come and do the activity for us.
- 163 Chn. : Sir, sir. sir. Chd.11 Chd 35 oh!
- 164 Tr. : Yes what do you observe from water and eh
- 165 Chn. : [Talking together]
- 166 Tr. : Eh cooking oil and what? And refresh. Yes Chd.8, what do you see?
- 167 Chn. : [Talking together]
- 168 Tr. : From this.
- 169 Chn. : Not mix
- 170 Tr. : They do not what?
- 171 Chn. : Mix
- 172 Tr. : So if they do no mix then cooking oil and Malta Guinness
- 173 Chn. : Sir, sir
- 174 Tr. : You sit down.
- 175 Chn. : [Talking together]
- 176 Tr. : I think this group.
- 177 Chn. : [Talking together]
- 178 Tr. : You have done it.
- 179 Chn. : Sir, sir, sir.
- 180 Tr. : What have you observed from this? Yes Serwah Chd 36
- 181 Chd 36: Not mixed
- 182 Tr. : They do not mix
- 183 Chn. : [Talking together].
- 184 Tr. : The next thing is cooking oil and kerosene
- 185 Chn. : [Talking together].
- 186 Tr. : Go and sit at your place.
- 187 Chn. : Sir, sir, Teacher I have not done it
- 188 Tr. : Kerosene and cooking oil.
- 189 Chn. : Sir **me nfa wei?**
- 190 Tr. : Take the kerosene, yes.
- 191 Chn. : [Talking together].
- 192 Tr. : Okay we have kerosene and cooking oil. Yes
- 193 Chn. : [Talking together].
- 194 Tr. : Yes.
- 195 Chn. : [Talking together].
- 196 Tr. : Yes.
- 197 Chn. : It is mixed..
- 198 Tr. : No they do not mix.
- 199 Chn. : [Talking together].
- 200 Tr. : Then coke and cooking oil.
- 201 Chn. : [Talking together].
- 202 Tr. : Hey! They do not mix. They do not mix.
- 203 Chn. : [Talking together].
- 204 Tr. : Chd 38. He! Chd 38

- 205 Chd 38: They do not mix.
- 206 Tr. : Correct. Refresh and what? Water. You can have refresh and water. What?
- 207 Chn. : They mix.
- 208 Tr. : They mix, Okay so if they mix you use the sign. Then we have cooking oil and refresh. They do not what? Mix. Then you have refresh and refresh do not make anything. go and sit down, Sit down. Then you have Malta Guinness and what? Refresh. Yes I want somebody.
- 209 Chn. : [Talking together].
- 210 Tr. : Do the refresh and Malta Guinness Then.
- 211 Chn. : Sir, sir, sir. sir, Sir.
- 212 Tr. : Kerosene, refresh and kerosene.
- 213 Chn. : [Talking together].
- 214 Tr. : So lets observe it.
- 215 Chn. : Oh sir!
- 216 Tr. : **Wote dan mu na wo didi.?**
- 217 Chn. : [Talking together].
- 218 Tr. : What do you observe from this activity?
- 219 Chn. : They do, they
- 220 Tr. : Chd 38.
- 221 Chd 38: They mix.
- 222 Tr. : They mix or they do mix. Okay if they do mix, we use what? The correct sign. Malta Guinness and refresh. Lets hear what? Refresh and kerosene.
- 223 Chd. : Sir.
- 224 Tr. : What is it?
- 225 Chn. : They don't mix.
- 226 Tr. : So I am passing here this time. Chd 39
- 227 Chd 39: They do not mix.
- 228 Tr. : They do not mix. Go and throw it away
- 229 Chn. : [Talking together].
- 230 Tr. : Then we have squash and refresh
- 231 Chn. : [Talking together].
- 232 Tr. : Yes what is the result? Chd 40
- 234 Chd 40: They have mixed
- 235 Tr. : They do mix.
- 236 Chn. : [Talking together].
- 237 Tr. : Hey! You go. Then we have Malta Guinness and water. Water and Malta Guinness. What? They mix. Then the cooking oil and the Malta Guinness. They mix. The Malta Guinness and Malta Guinness. They do no. Eh we have Malta Guinness and kerosene
- 238 Chn. : [Talking together].
- 239 Tr. : Then Malta Guinness and squash.
- 240 Chn. : Sir, sir, sir. sir.
- 241 Tr. : Yes Chd.22
- 242 Chd.22: [Inaudible amid talking together].

- 243 Tr. : Okay, lets see. This is what? Chd 41. What do you do? They make what liquid? Kerosene and what?
- 244 Chd 41.: Kerosene and Malta
- 245 Tr. : Okay, Malta Guinness and kerosene. Is what? They do what?
- 246 Chn. : Mix.
- 247 Tr. : Then we have squash. Hey!
- 248 Chn. : [Talking together].
- 249 Tr. : We have Malta Guinness and squash. They do what? Mix
- 250 Chn. : [Talking together].
- 251 Tr. : Okay since the bell has gone for break we have so many noise. We shall end here and continue after break.

Appendix 5 (9) TC: Ghanaian language

LESSON : NINE
 TEACHER : "TC"
 CLASS : FIVE
 SCHOOL : ABORDFO SUKUU.
 SUBJECT : GHANAIAN LANGUAGE (READING).
 TOPIC : ANUANOM BAANU (TWO BROTHERS)
 DATE : 6TH FEBRUARY, 1996.

- 1 Tr. : Saa nsem yi a egu so nyinaa firi krataa yi a yebɛ kan yi. eye Nimdeɛ Nkwankyerɛ. Seesei ya duru krataa fa a etɔso nkono. ehɔ na saa mmre yi yebɛ kan. Yebɛ sua nsem a emu ye duru kakra ewɔ saa akinkan yi mu. Obia nhweso na yen kan. Nea edinkan no me be bubɔ words no nyinaa. Me bububɔ nsem no nyinaa din akyere mo. Nti akyire no na ya kan no baakobaako baako. Ansa na ya sane de ebɔ nso aka asem akyere mo. Anuanom.
- 2 Chn. : Anuanom.
- 3 Tr. : Dabi. Anuanom, baanu, Bomdwere, akuraa. merehunu, mmesra, nnansa, hyɛɛte, apiripiriagorɔ, abɔnten, fituo, summie mereboaboa, Memene, Yaa ahenewa, amanneɛ, akwaaba, mfikyikwan, abɔntenkwan
- 4 Chn. : Anuanom.
- 5 Tr. : Anuanom
- 6 Chn. : Anuanom
- 7 Tr. : Baanu.
- 8 Chn. : Baanu.
- 9 Tr. : Baanu.
- 10 Chn. : Baanu.
- 11 Tr. : Bomdwere.
- 12 Chn. : Bomdwere.
- 13 Tr. : Bomdwere.
- 14 Chn. : Bomdwere.
- 15 Tr. : Akuraa.
- 16 Chn. : Akuraa.
- 17 Tr. : Akuraa.
- 18 Chn. : Akuraa.
- 19 Tr. : Merehunu.
- 20 Chn. : Merehunu.
- 21 Tr. : Merehunu.
- 22 Chn. : Merehunu.
- 23 Tr. : Mmesra.
- 24 Chn. : Mmesra.
- 25 Tr. : Mmesra.
- 26 Chn. : Mmesra.
- 27 Tr. : Nnansa.

28	Chn. :	<u>Nnansa.</u>
29	Tr. :	<u>Nnansa.</u>
30	Chn. :	<u>Nnansa.</u>
31	Tr. :	<u>Hyεεte.</u>
32	Chn. :	<u>Hyεεte.</u>
33	Tr. :	<u>Hyεεte.</u>
34	Chn. :	<u>Hyεεte.</u>
35	Tr. :	<u>Apiripiriagor▷.</u>
36	Chn. :	<u>Apiripiriagor▷.</u>
37	Tr. :	<u>Apiripiriagor▷.</u>
38	Chn. :	<u>Apiripiriagor▷.</u>
39	Tr. :	<u>Ab▷nten.</u>
40	Chn. :	<u>Ab▷nten.</u>
41	Tr. :	<u>Ab▷nten.</u>
42	Chn. :	<u>Ab▷nten.</u>
43	Tr. :	<u>Fituo.</u>
44	Chn. :	<u>Fituo.</u>
45	Tr. :	<u>Fituo.</u>
46	Chn. :	<u>Fituo.</u>
47	Tr. :	<u>Summie.</u>
48	Chn. :	<u>Summie.</u>
49	Tr. :	<u>Summie.</u>
50	Chn. :	<u>Summie.</u>
51	Tr. :	<u>Mereboaboa.</u>
52	Chn. :	<u>Mereboaboa.</u>
53	Tr. :	<u>Mereboaboa.</u>
54	Chn. :	<u>Mereboaboa.</u>
55	Tr. :	<u>Memene.</u>
56	Chn. :	<u>Memene.</u>
57	Tr. :	<u>Memene.</u>
58	Chn. :	<u>Memene.</u>
59	Tr. :	<u>Yaa ahenewa.</u>
60	Chn. :	<u>Yaa ahenewa.</u>
61	Tr. :	<u>Yaa ahenewa.</u>
62	Chn. :	<u>Yaa ahenewa.</u>
63	Tr. :	<u>Amannee.</u>
64	Chn. :	<u>Amannee.</u>
65	Tr. :	<u>Amannee.</u>
66	Chn. :	<u>Amannee.</u>
67	Tr. :	<u>Akwaaba.</u>
68	Chn. :	<u>Akwaaba.</u>
69	Tr. :	<u>Akwaaba.</u>
70	Chn. :	<u>Akwaaba.</u>
71	Tr. :	<u>Mfikyikwan.</u>
72	Chn. :	<u>Mfikyikwan.</u>
73	Tr. :	<u>Mfikyikwan.</u>

- 74 Chn. : Mfikyikwan.
- 75 Tr. : Abɔntenkwan.
- 76 Chn. : Abɔntenkwan.
- 77 Tr. : Abɔntenkwan.
- 78 Chn. : Abɔntenkwan.
- 79 Tr. : Saa mmɛ yi me min kabi. Mmo nkowa mo be kan ne nyinaa akyere me. Baako bia ewɔ sɛ mmo bɔ din mmeinu. Okee mmo nhye asee.
- 80 Chn. : Anuanom, anuanom, baanu, baanu, Bomdwere, Bomdwere akuraa, akuraa, merehunu, merehunu, mmesra, mmesra, nnansa, nnansa, hyɛte, hyɛte, apiripiriagorɔ, apiripiriagorɔ, abɔnten, abonten, fituo, fituo.
- 81 Tr. : Hɛ! Me kan no sɛɛn? fi tuo? Mese sɛn?
- 82 Chn. : Fituo.
- 83 Tr. : Mmo nka ma me ntea.
- 84 Chn. : Fituo, fituo, summie, summie, mere boaboa, mere boaboa.
- 85 Tr. : Hwe ma dinkan akyere mo sɛ re wei wɔha ye nka no sɛ mere boaboa. yɛka no sɛn?
- 86 Chn. : /Meboaboa/ merebaboa, merebaboa, Memene, Memene, Yaa ahenewa, Yaa ahenewa, amanneɛ, amanneɛ, akwaaba, akwaaba mfikyikwan, mfikyikwan, abɔntenkwan, abɔntenkwan.
- 87 Tr. : ɛye mmo aye adeɛ. Saa mere yi mɛpe obia wɔ no nkoa betumi abobɔ ne nyinaa dini ama ye nyinaa yatea. Wei wɔ kan ne a obia ngyeso. Yɛpe obia ɔbetumi a kan ne nyinaa Chd.18. Chd.24.
- 8 Ama : Anuanom.
- 89 Chn. : Anuanom.
- 90 Tr. : [Signals for no response].
- 91 Ama : Baanu, Bomdwere, akuraa, merehunu, mmesra, nnansa, hyɛte, apiripiriagorɔ, abɔnten, fituo, summie mereboaboa, Memene, Yaa ahenewa, amanneɛ, akwaaba, mfikyikwan, abɔntenkwan
- 92 Tr. : Mmo mmɔ mo nsam ma no.
- 93 Chn. : [Clapping].
- 94 Tr. : Hwan bio nso na eba abe kan ne? ɔbaa baako aba a, me hyia bemma nso. Nye mbaa nkoa na ebe kan ne. ɛɛ Appiaku.
- 95 Appiaku: Anuanom, baanu, bomdwene, akura. minhunu, mmesra
- 96 Tr. : Minhunu ɛye dɛn? Merehunu /mehunu/
- 97 Appiaku: Merehunu, mmesra, nnansa, hyɛte, apiripiriagorɔ, abɔnten, fituo, summie mereboaboa, Memene.
- 98 Tr. : ɛnye Memene, Memene. Ka bio ma me ntea.
- 99 Appiaku: Memene
- 100 Tr. : Aha kɔ so
- 101 Appiaku: Yaa ahenewa, amanneɛ, akwaaba, mfikyikwan, abɔntenkwan
- 102 Tr. : Mmo mmɔ mo nsam ma no.
- 103 Chn. : [Clapping].

- 104 Tr. : Hwan bio? Chd.15
- 105 Chd.15: Anuanom, baanu, Bomdwere, akura, merehunu, mmesra, nnansa, hyeete, apiripiriagor, abnten, fituo, summie mereboaboa, Memene, Yaa ahenewa, amannee, akwaaba, mfikyikwan, abntenkwan
- 106 Tr. : Mmo mm mo nsam ma no.
- 107 Chn. : [Clapping].
- 108 Tr. : Seesei beberee atumi a kan. ee word a mede be siso anaa se asem bia mede be siso bia na aye den? ma fre wo na wa b din. Me nfre woa nkasa. me mpe sir, sir bia. Wei ye b din sen? Bobbi
- 109 Bobbi: Yaa ahenewa
- 110 Tr. : Mmo mm mo nsam ma no.
- 111 Chn. : [Clapping].
- 112 Tr. : Wei ye b din sen? Chd.22
- 114 Chd.22: Apiripiriagor.
- 115 Tr. : Mmo mm mo nsam ma no.
- 116 Chn. : [Clapping].
- 117 Tr. : Wei ye b din sen?
- 118 Chd. : Mereboaboa
- 119 Tr. : Mmo mm mo nsam ma no.
- 120 Chn. : [Clapping].
- 121 Tr. : eye seesei yede ebia yebe kyere ebia emu. Seesei yebe kyere bia ase se be ye a obia be te ase. Na se nea ye be si a yebe kyere ase no. Me pe se ye de kan nsem. efiri se, se ye de ka nsem a enno na eba ma yate ase yiye. Ye ka no baakobaako a ebia na ne ntease no an nye yiye papa. Na yede ka nsem dee a ebe ma nsem no aye de yiye Na afei ye betumi ate ase paa. Na dee edikan, anuanom. Hwan na wde anuanom beka asem ma yatea? Chd.23.
- 122 Chd.23: Anuanom baanu enam.
- 123 Tr. : Mmo mm mo nsam ma no.
- 124 Chn. : [Clapping].
- 125 Tr. : Hwan bio na edeanuanom ebe sane aka asem ama yatea? Atta Kwarteng.
- 126 Kwarteng: Anuanom no rek dwom.
- 127 Tr. : Anuanom rek dwom. Aa! Ma dikan aka kyere mo se re re no ye twerew na ye ka a ye nka. Se wo ahunu. enti ee wo be yi re no afi h, na wo aka asem fofor emaa yatea. Ka ma ye ntea. Yetea.
- 128 Kwarteng: Anuanom ek dwom.
- 129 Tr. : Anuanom ek dwom. Mmo, eye. Hwan nso bio. Dee etwa tu koraa. Darko.
- 130 Darko: Ye ye enuanom mmeensa na ete fie.
- 131 Tr. : Mmo mo mm mo nsam ma no.
- 132 Chn : [Clapping].
- 133 Tr. : Aha. enti ye atumi de anuanom aka asem a obi, se wote anuanom, wonim sedee esi, sedee ye si de aka asem no, ama aye eden? Ne

- nteasee aba paa yiye. Nti banuu obi nso de beka asem ama yatea. Baanu. Douglas.
- 134 Douglas: Ye ye baanu na yedi ye.
- 135 Tr. : Ye ye mmeinu na yedi ye. Se wo ka asem a, se ade koro a mo di ye, se aduane o! Anaa ankaa o! Anaa se biribi a ete saa no, wobe tumi de saa ade koro noa mo di ye no atuaso ama na ye yiye. Se ebia ye ye baanu na yek afuom. Anaa se ye ye baanu na ye di fufuo no. Hwan nso bio na wode baanu be sane aka asem ama yatea?
- 136 Chd. : Yen baanu na yek nsuo.
- 137 Tr.. : Mmo. Yen baanu na yek nsuo. Wa ye adee. Chd.4
- 138 Chd 4: Yen baanu na yek sukuu.
- 139 Chn. : Yen baanu na yek sukuu. Nea etso enne Bomdwere. Se ye hwe krattaa no mmu a Bomdwere eyeden? Chd.24
- 140 Tr. : eye kuro.
- 141 Chn : eye kuro.
- 142 Tr. : eye kuro. eye kuro. Na hwan na ede saa Bomdwere beka asem ma yatea. Chd.5.
- 143 Chd.5: Bomdwere ye kuro kesee.
- 144 Tr. : Mmo. Bomdwere ye kuro kesee. Hwan nso bio?
- 145 Chd. : Bomdwere ye kuro a me firi.
- 146 Tr.. : Me firi Bomdwere. Yes Chd.19
- 147 Chd.19: Me firi Bomdwere. Ye nnwene ntoma w Bomdwere.
- 148 Tr. : Woso ka bi. Ye nk dee etso, akura, akura. Chd 32.
- 149 Chd 32: Maame Atta eriri akura.
- 150 Tr. : Maame Atta eriri akura. Mmo wo aye ade. Hwan nso bio? Denis.
- 151 Denis : Papa no w akura no ase.
- 152 Tr. : Mmo wo aye adee. Woso fa akura ka asem ma yentea.
- 153 Chd. : M'adamfo bi te akuraa.
- 154 Tr. : M'adamfo bi te akuraa. eye. Merehunu, merehunu. Obi nnso nfa nka asem ma yentea. Chd.3.
- 155 Chd.3: Me papa enne h na merehunu amannee sei.
- 156 Tr.. : Mmo wo aye adee. Hwan nso bio? Chd.45.
- 157 Chd.45: Me w fa nneh na merehunu amannee sei.
- 158 Tr. : Aye se asem koro. Anka na me pe se asem no ne nyinaa ennk fako. Wei ka wei w ha na wei nsoo aka wei w ha, na anka ama asem no aye den? Na yate ase yiye. Se ye nyinaa reka baako saa ema deee me pe se yete ase no ek yiye papa. Nti Chd.1, woso ka bi ma me ntea
- 159 Chd.1: Merehunu kaa no.
- 160 Tr. : Me nhunu kaa no. Anaa se merehunu kaa no. eye. Ye nhwe dee etoaso. Mmesra. Chd.22
- 161 Chd.22: Me mmesra m'adamfo.
- 162 Tr. : Me mmesra m'adamfo. Wo so ka asem ma ye ntea
- 163 Chd. : emmesra me bio.
- 164 Tr. : emmesra me bio. Yes Douglas.

- 165 Douglas: Me mmesra wo bio.
- 166 Tr.: εε εγε. Mese obi aka εγε. Wei aka wei aka εγε, ya nya nsosonea kakra εωδ ntamu. Nti nea ετδσοδ γε nnansa. Nnansa. Chd 29 ka ma γε ntea.
- 167 Chd 29: Mekδ, merekδ me kurom akδdi nnansa.
- 168 Tr.: Mekδ, merekδ me kurom akδdi nnansa. [points to a child]
- 169 Chd.: Merekδ me maame hδ akδdi nnansa
- 170 Tr.: Ade korδ. Ade korδ. Chd.25.
- 171 Chd.25: Mbε di nnansa wδ ne nkyen.
- 172 Tr.: Mbε di nnansa wδ ne nkyen. εε nansa no εγε. Σε wo hwε sεδεε krataa no mu wδsi ka nnansa noa. Σεbi wδ kyere biribi σε εε nnansa yi. Σε wahunu? Wδn kyere εnna mmeensa πε, na εmo aye te σε βεγε σε nna kakra ni. Σε wahunu? εnna no akyε kakra σε ana ayεδen? δmaame anba mmesra no. εγε γε ntoaso. Hyεete. Wei δεε anka εωδ σε nipa βεβερεε εka bi εnso mme yi nipa mmeinu πε.
- 173 Chn.: O!
- 174 Tr.: Nipa mmeinu πε εnna me ma wδm kasa. Me πε nipa γε nkasa γε. Sorigate
- 175 Sorigate: Me wδ hyεete
- 176 Chn.: Sir, sir, sir.
- 177 Tr.: Me wδ hyεete. Yes Okyere.
- 178 Okyere: Me maame atδ hyεete abre me.
- 179 Tr.: Me maame atδ hyεete abre me. Me hyεete no nyinaa atete. εγε. Nea ετδσοδ εγε apiripiriagorδ, apiripiriagorδ.
- 180 Chn.: Sir, sir.
- 181 Tr.: Mese me mπε sir, sir εbia εωδha. [points to a child].
- 182 Chd.: ennora mede apiripiriagorδ.
- 183 Tr.: ennora mede apiripiriagorδ. Yes
- 184 Chn.: ennora me kδdee apiripiriagorδ ma me maame hwii me.
- 185 Tr.: εγε ade korδ. Wo kasa, kasa den σε εnye saa wo a wo kasa εmba no γε npene wo.
- 186 Chd.: Nkwadaa taa di apiripiriagorδ.
- 187 Tr.: Mmo wo aye adeε. εγε δεε ετδσο, abδnten.
- 188 Chn.: Sir, sir.
- 189 Tr.: Abδnten David.
- 190 David: Wδ didi wδ abδnten.
- 191 Tr.: Wδ didi wδ abδnten. Chd.14.
- 192 Chd.14: Me gyina abδnten.
- 193 Tr.: Me gyina abδnten. Agnes.
- 194 Agnes: Me wδfa kδ abδnten.
- 195 Tr.: Yoo! εγε. εε fituo. Hwan nna εde βεka asem ma yatea? Fituo. Yes.
- 196 Chd.: Papa no reto akwadaa no fituo.
- 197 Tr.: Saa fituo no a εωδ krataa no mu no εnye εno na wo ka. Nso wo aka biribi afa ho δεε. Chd.4.

- 198 Chd.4: Me papa reto me fo.
- 199 Tr. : Saa afituo wei no enye se yeto fo. enye se afutuo. Me pe dee wɔ betumi aka asem no mma yate aseɛ sɛdeɛ krataa no kyere no. Mame.
- 200 Mame: Me nkoa na mete saa fituo yi mu.
- 201 Tr. : Mmo mo mmɔ mo nsam ma no.
- 202 Chn : [Clapping].
- 203 Tr. : Aye se ya gyae wo nkoa ɛwɔ fituo mu obia ene hɔ, wo nkoa ya gyae wo wɔ fie, na wo papa ne wo maame obia kɔ ɛdwuma. Aka wo nkoa wɔhɔ. Wose me yɛden? Aka me nkoa wɔ he ne? Fituo mu. Sumiie.
- 204 Chn : Sir, sir.
- 205 Tr. : Chd 37
- 206 Chd 37: ennora me daa sumiie so.
- 207 Tr. : Mmo. Wo aka bi. Chd.16.
- 208 Chd.16: Me nsa da sumiie no so.
- 209 Tr. : Me nsa da sumiie no so. Chd 29.
- 210 Chd 29 : Me sumiie no atete.
- 211 Tr. : eye. Nea ɛtso. Mereboaboa, mereboaboa, mereboaboa. Nkansa
- 212 Nkansa: Mereboaboa me nneɔma ano.
- 213 Tr. : Wo nkasa enne. Kasa ma yentea.
- 214 Chn : Mereboaboa me nneɔma no makɔ me kurom.
- 215 Tr. : Chd.6.
- 216 Chd 6.: Mereboaboa me nneɔma no makɔ akura.
- 217 Tr. : Wahunu se asem a mo ka yi ne nyinaa ye ade korɔ. Me pe se esesasesa. Chd.14.
- 218 Chd.14: Me wɔfa reboaboa neɛma ano.
- 219 Tr. : enno dee eye a na mme pe atea. Chd.14 ka mereboaboa nneɛma ano. Yen hwe Memene, Memene. Chd.52 wo nkasa enne.
- 220 Chd.52: enne Memene mme kɔ afuom.
- 221 Tr. : enne Memene mme kɔ afuom. Yes.
- 222 Chd : Yee wo me Memeneda.
- 223 Tr. : Yes wo aye adeɛ. Yaa ahenewa. Yen fa nka asem ma yentea. Chd.11 ahenewa.
- 224 Chd : Me kyia wo o! Yaa ahenewa.
- 225 Tr. : ekyere se Yaa ahenewa nno ayɛden? eye nkyia. Se obi kyia wo a, eye ngyesoɔ a woye den? Ye gyeɛ. ene den? Yaa ahenewa. enono.
- 226 Chn : Yaa akorɔntɔ.
- 227 Tr. : Yen hwe amanneɛ. Seth.
- 228 Seth : Amanneɛ ne sen?
- 229 Tr. : W'amanneɛ ne sen? eye. ene se obia wotu kwan na wo kɔ soe bebia, ye bisa wo den/
- 230 Tr+Chn: Amanneɛ
- 231 Tr. : Akwaaba, akwaaba. Alfred.
- 232 Alfred: Owura akwaaba.
- 233 Tr. : Owura akwaaba Ansere.

- 234 Ansere: ennora me maame ka kyerε me sε me nkɔ nkɔ kyia maame no ma no sε ɔmano akwaaba.
- 235 Tr.: Wo ayε adeε. Saa akwaaba no ne nkyerε mu tiawa ne sε bεbi na wo εkyia. Sε wo akɔ kyia no. Na ayε dεn? Na wɔ no nso abε ma akwaaba. Nea εtoaso. εyε enfikyikwan. Yes Seth.
- 236 Seth : Nfikyikwan bi da fie no akyi.
- 237 Tr.: εyε kakra. Yes.
- 238 Chn : Dabia me fa nfikyikwan εna εkɔ ma afuom.
- 239 Tr.: Wo aka bi.
- 240 Chn : Akosua taa fa nfikyikwan no so.
- 241 Tr. : Yoo nfikyikwan ayε te sε, εfie bi wɔhɔ a, wobε hwε na εyε mu. Sε wahunu na abɔnten kwan no deε, εnno deε εda abɔnten. Na nfikyikwan nodesε εda hene? εnoso da nfikyirie. Saa na nfikyikwan εnno nso nono. εyε me sε maka abɔntenkwan no akaho pireko. Nti obi nfa nka asem baako pε. na yεn kɔ so. Esther.
- 242 Esther: Akosua gyina abɔntenkwan no so.
- 243 Tr. : Akosua gyina abɔntenkwan no so. εyε, εyε me sε seesei no ya kasa ama asem foforɔ no a yε sua yε no yahunu ne nyinaa nteasesε. Nti yεbε sane abubɔbɔ ne nyinaa εdin εbio. Nti yεnhwε aseε.
- 244 Chn : Anuanom, baanu, Bomdwere, akuraa, merehunu.
- 245 Tr. : /Mehunu/ Me (re) hunu.
- 246 Chn : Merehunu, mmεsra, nnansa, hyεte, apiripiriagorɔ, abɔnten, fituo, summie mereboaboa, Memene, Yaa ahenewa, amanneε, akwaaba, mfikyikwan, abɔntenkwan.
- 247 Tr. : Yoo εyε! Seesei nsem a εwomu a εyε den no nyinaa yahunu. Nti seesei aduru sε yεbε kan yε nhoma no. Obia εfa ne reading book.
- 248 Chd : Twi.
- 249 Tr. : Obia mfa ne Twi. Krataa fa εduonu mmeensa nkoa. εm sε εbε yε a yεbε nya nipa bεbereε εma wɔn atumi a kan. Obia nhwε mu na me enkan εkyerε mo. Me kan ne akyerεw nti yε dii na tea. Anuanom baanu bi. Bomdwere akuraa bi ase. Akuraa no ase ayε dii. Nkokɔ nkoa εna εma wo hunu sε nipa theɔ. Dankwa asɔre. Wɔde ne ntoma afa ne kɔneho. Wɔ gyina hɔ dwene biribi ho. Me papa εnehɔ na merehunu amanneε sei. Mea me nua na wɔ npε sε wɔhwε me yiye kora saa. Nnansa yi nso εnam me Nana yadeyε nti maame nso εmba ha mmεsra yεn kora na wahunu deε εkɔso. εden kora na me nyɔ? εsεsε mekɔ me maame hɔ. Wate deε Dankwa εka no nyinaa. Dankwa εden asem na woka yi? Aden na εsεsε me hunu amanneε saa? εha mete yε yi mete ha kwa. εden na wopε sε me yε mawo? Me mawo aduane endi anaa? Wo εkɔ sukuu so a me ma wo sika? Me ntua wo sukuu ho ka? Afei me nyε dεn bio? Me hyεte atete yi wo atɔ bi ama me? Me nim deε nti a me ntɔ bi εma wɔ. Wode hyεte no kɔ di apiripiriagorɔ na etetesε. Hyεte a εhyε wɔ yi sε εyε mmono kora. Sε wodi apiripiriagorɔ a ete saa, wo tete wo ntadesε a εnkyede sε mbetɔ foforɔ ama wo. Dabia me nka saa

asem yi nkyere wo? Nanso won te. esese wo sua sɛdɛɛ yɛhwɛ adɛɛ so yiye. Afei daa wokɔ abɔnten na wo agye me hɔ na me nkoa na mete fituo mu. Sɛ woba kora na me nso me se mekɔ di agorɔ a wose dabi. Aha yia na yɛbɛka asee. enti me ma mu siima enum. Obia nfa nhwɛ mu na wɔn kan. Na me wei a, siima enum no so a, mmɛ ma obia a kan. Nti me bɔ wo din a na wo a kan. Nti dɛɛ wo kan no kan no wɔ wotiri mu.

- 250 Chn : Yɛ kan wɔ yɛ tiri mu.
- 251 Tr. : Sɛ obia a kan ne aweie? Mmo nhwɛ mu na me bɔ bisabisa mo nsem. Mmemma mmeinu bɛn na wɔm papa gya wɔn hɔ? Chd.22.
- 252 Chd.22: **Dankwa ne ɔkyere.**
- 253 Tr. : Dankwa ne ɔkyere. Den kora na na eha Dankwa? Mavies.
- 254 Mavies: efiri sɛ na ne sukuu atadɛɛ atete.
- 255 Tr. : Na ne sukuu atadɛɛ atete. Na, na ne sukuu atadɛɛ no nkoa na na atete anaa?
- 256 Chn : Dabi.
- 257 Tr. : Afei den bio na na eha no ekaho? Chd.13
- 258 Chd.13: Na ne fie atadɛɛ nso atete.
- 259 Tr. : Na atete no, na onua panyin no ahunu anaa sɛ ɔnhunu yɛ? Sylvester.
- 260 Sylvester: Na wahunu.
- 261 Tr. : Na wahunu. na den nkoa nti na na ne nua panyin no mpɛ sɛ wɔɔ atadɛɛ no bi mano no? Patrick.
- 262 Patrick: efiri sɛ wɔɔ ma no a wɔ de kɔ di mpiripiriagorɔ.
- 263 Tr. : Wɔɔ ma no a na wɔde akɔ di apiripiriagorɔ. Na sɛn na, asem bɛn na ɛɛ, ɔkyere kakyere Dankwa sɛ, sɛ wɔ gyae dɛɛ a ɛnna wɔbɛ ɔ bi ama no no? Na sɛ wan gyae dɛɛ a wɔntɔ bi ɛma no. Den asem a? Douglas.
- 264 Douglas: Wɔ ka kyere no sɛ, 'sɛ wo gyae apiripiriagorɔ no dɛɛ a' wɔbɛ ɔ bi amano.
- 265 Tr. : Afei ato sɛ yɛ bɛ kan. Yɛbɛ hia nipa baanuu. Baako bɛ yɛ Dankwa na baako nso ayɛ ɔkyere, na wɔm a kan ma yatea. Chd.24 wobɛ yɛ Dankwa. Gyina hɔ na kan. Na Chd.11 wo bɛ yɛ ɔkyere.
- 266 Chn : Aka baako.
- 267 Tr. : Aka dɛɛ wɔ no so bɛ kan ne dɛɛ ekaho no ama yɛn Chd 8 Asamoah woso wobɛ kan nea ekaho no. Nti Chd.8 hyɛ asee kan ma yɛnhwɛ.
- 268 Chd.8: Bomdwere akuraa bi ase. Akura no ase ayyɛ dii. Nkokɔ kwa, nko kwa ɛne ara ɛna ɛma wo hunu sɛ nnipa tehɔ. Dankwa asɔre ɛde ne ntoma asɛn ne kɔmu. ɔgyina hɔ redwene biribi ho.
- 269 Tr.: Chd.8 woka rere no wopɛ no paa. Ma aka akyere wo sɛ ɛnno no ɛfa mba. ɛnna ara nso no yɛn ka mo saa. Yɛ ka no sɛ a. Nkokɔ ara kwan nea na ekwan. Dankwa wobɛ kan ma yatea.
- 270 Chd.24 : **Me papa ɛne hɔ nna merehunu amanneɛ sei yei. Mea me nua na wɔ npɛ sɛ wɔhwɛ me yiye kora saa. Nnansa yi nso ɛnam me Nana yadeyɛ nti, maame nso mma ha mmesra yɛn naa wahunu dɛɛ ɛkɔso. ɛdɛn kora na me nyɛ? Mepɛ sɛ me kɔ me maame hɔ.**

- 271 Chd.11: Dankwa ɛɛn asem na wore ka no?
- 272 Chd.24: Aden na ɛsɛsɛ me tina ha na me hunu amanneɛ saa? Aha me tɛɛ yi wo nhwɛ me yiye. Nti sɛ me te ha me te ha kwa.
- 273 Chd.11: ɛɛn na me yɛ ma wo? Me ma wo aduane anaa? Wore kɔ sukuu nso a me ma wo sika? Me ntua wo sukuu ho ka? Afei me nyɛ ɛn bio?
- 274 Chd.24: Me hyɛɛte atete yi wo atɔ bi ama me?
- 275 Chd.11: Me nim deɛ
- 276 Tr. : Me nim deɛ
- 277 Chd.11: Me nim deɛ nti a me ntɔ bi ɛmma wo no. Wode hyɛɛte no kɔ di apiripiriagorɔ ɛna ɛtete yɛ. Hyɛɛte a ɛhyɛ wo yi ɛnyɛ mono kora? Sɛ wode agorɔ a ɛte saa ma ɛtete wo atadeɛ a ɛdwene sɛ mmɛtɔ f
- 278 Tr. : Mmɛtɔ fororɔ
- 279 Chd.11: Mmɛtɔ fororɔ ama wo. Dɛbia me nka saa asem yi nkyereɛ wo? Nso wonte. ɛsɛsɛ wo sua sɛdeɛ yɛhwɛ adeɛ so yiye.
- 280 Chd.24: Afei daa wo kɔ abɔnten a na wo agyae me hɔ na me nkoa me te fituo mu.

APPENDIX 5 (10) TC: Mathematics

LESSON : TEN
TEACHER: "TC"
CLASS : FIVE
SCHOOL : ABORFO SUKUU.
SUBJECT: MATHEMATICS
TOPIC : AVERAGES (THE NUMBER PLANE)
DATE : 7TH FEBRUARY, 1996.

- 1 Tr. : Eh last time we learnt about averages, averages then we moved on to the number plane. Then we are still on it. As we all know the number plane is as the same as average, but the number plane we are talking about, it shows us about the picture. How we can use the number we have in average to draw a graph. That's what we are talking about. Before we move on, what is an average? Who can explain the word average to us? Yes anybody should try average.
- 2 Chn. : [Talking together].
- 3 Tr. : Nobody? Oh! Yes Chd.24 you will try. What's an average?
- 4 Chn : Silent
- 5 Tr. : You don't talk? you see oh! Yes Bridgett. What's an average? You should talk.
- 6 Bridgett: Finding, finding some sums of peoples.
- 7 Tr. : Yes you have said something. Yes.
- 8 Chd : An average is said a sum of a total divided by the number.
- 9 Tr. : You have done well. You have done well. Clap for her.
- 10 Chn : [Clapping].
- 11 Tr. : You are all sitting down looking at my faces. He has already done it. Is said an average is the sum total of the items divided by number of what? The items. That's the average. Okay, then the graph. We have so many types of graphs.
- 12 Chn. : [Talking together].
- 13 Tr. : Eh, last time we learnt about the bar graph. Hein? Bar graph is where we use some numbers, we draw and the graph should stay apart. Hein?
- 14 Chn : [Talking together].
- 15 Tr. : Draws on the board. That is the bar graph. So we move on to talk about the picture graph. Picture graph, we can represent any eh, thing to stand for a picture. For example, lets take a town. There are so many peoples in a town. Then lets take state experimental town. Then what else should we use again? State experimental town. Yes Chd.7!
- 16 Chd.7: Darkwa dwom town.
- 17 Tr. : Darkwa dwom.
- 18 Chn. : [Talking together]
- 19 Tr. : Darkwa dwom. Yes Oti
- 20 Oti : Nhyiaso.
- 21 Tr. : Nhyiaso. Yes

- 22 Chd : Ahodwo.
- 23 Tr. : Ahodwo. Some one said TUC. Okay, lets find this. Then we are saying that
- 24 Chn. : [Laughing]
- 25 Tr. : You are laughing I am drawing something on the board but you are laughing. Can you try to. Who can draw a nice person like what I am trying to draw it on the board
- 26 Chn : [Talking together]
- 27 Tr. : Okay, so I am saying that
- 28 Chn : [Talking together]
- 29 Tr. : One person. This, this stands for one million
- 30 Chn. : [Talking together]
- 31 Tr. : So how many Chn in Aborfo sukuu? Yes Chd.7
- 32 Chd.7: Four million
- 33 Tr. : Four million. How many people living at Darkwa dwom? Yes Catherine
- 34 Catherine: [Inaudible].
- 35 Tr. : Is it correct?
- 36 Chn. : No sir.
- 37 Tr. : Yes Chd.5
- 38 Chn : Two, point five million
- 39 Tr. : Two, point five million. How many people living at Darkwa dwom? Eh Nhyiaso. Yes.
- 40 Chn : Five million.
- 41 Tr. : Five million. Then lets say TUC, TUC Yes Chd.8.
- 42 Chn. : [Inaudible].
- 43 Tr. : One point five million. How many people living at Ahodwo? Yes.
- 44 Chn : [Talking together].
- 45 Tr. : Is it five million?
- 46 Chd : Sir
- 47 Tr. : Yes. Chd 35. How many people living at Ahodwo?
- 48 Chd 35 : No response.
- 49 Tr. : You don't know?
- 50 Chd : Sir. Sir.
- 51 Tr. : Yes Emanuel
- 52 Emanuel: Five hundred thousand.
- 53 Tr. : Five hundred thousand. Yes so we use this to represent what? That's what/ This what, we call pictorial graph. Pictorial graph. We use pictures to represent what? Things. Okay, so lets turn back to the book.
- 54 Chn : [Talking together]
- 55 Tr. : Ghana Mathematics Series page 79.
- 56 Chn : [Talking together]
- 57 Tr. : Yes exercise two. Reading and Interpretation of picture graphs and circle graph. We are talking about the picture graph first. So you study the picture graphs there.
- 58 Chn. : [Talking together]

- 59 Tr. : Then after a certain period I will ask you some questions. So you study the picture there.
- 60 Chn : [Talking together]
- 61 Tr. : Have you finished? Then how many ships were unloaded at Takoradi? How many ships were unloaded? Yes.
- 62 Chd. : Two.
- 63 Tr. : Two. Is it only two?
- 64 Chn : No sir.
- 65 Tr. : Two what? Only one ship stands for what? Lets find it.
- 66 Chn : [Talking together].
- 67 Tr. : One ship stands for what? Yes. One ship stands for what?
- 68 Chn. : One, one million
- 69 Tr. : One million tons. So if it is two it should be what? Esther.
- 70 Esther : Two million
- 71 Tr. : Two million. You have done well. Eh Buchana how many people eh, how many tons where unloaded at Buchana? Yes.
- 72 Chn. : Nine million.
- 73 Tr. : Is it nine million?
- 74 Chn : No sir.
- 75 Tr. : Yes Chd.59
- 76 Chd.59 : Eight point five million
- 77 Tr. : Eight point five million. Monrovia, Monrovia, Monrovia Ann Chd.10.
- 78 Ann : Thirteen million
- 79 Tr. : Thirteen million. Tema, Yes Chd.24.
- 80 Chd.24 : Eight point five million
- 81 Tr. : Is it true?
- 82 Chn. : Yes sir
- 83 Tr. : Okay. Eight point five million
- 84 Chn : Sir, sir Buchana is not eight point five million is eleven point five
- 85 Tr. : So the one who said thirteen you are wrong. so Buchana how many? Chd.4
- 86 Chn : Eleven point five million
- 87 Tr. : Eleven point five million. Is it correct?
- 88 Chn. : Yes sir.
- 89 Tr. : So with this we know that we are using the picture of ship to stand for some things. Okay?
- 90 Chn : Yes sir.
- 91 Tr. : Then how many tons of cargo were unloaded in each port in 1970? With this how are we going to do it?
- 92 Chn. : [Talking together].
- 93 Tr. : Who can tell me? It is said that how many tons of cargo were unloaded in each port in 1970? If the question is asked you like this. How are you going to solve it? Yes Chd.7?
- 94 Chd7 : You write the towns and then you write the number of the millions.

- 95 Tr. Yes you are correct. Clap for her.
- 96 Chn : [Clapping]
- 97 Tr. : A, (a) It says that you write the town and the number of cargoes they were unloaded. So you start. Lets say, Takoradi two million. Tema, eight point five million. Buchana, eleven point five million. Monrovia, thirteen million. Then that's the answer. Someone should read question number two. Chd60.
- 98 Chd.60 : How many tons of cargo, all together were unloaded in the four ports in 1970?
- 99 Tr. : Is correct. He's saying that how many tons of cargo, all together were unloaded in the four ports in 1970? How are we going to do it? Yes Chd.5?
- 100 Chd.5: We would add all the thousands which were imported in 1970 and you write the answer.
- 101 Tr. : Yes with this you are going to add the whole thing. Hein? Number one is saying that you just leave them. Then the second one means that you have to add the whole thing. Yes, I saw, you want to ask a question. I saw your hand up. What's your problem?
- 102 Chd.5.: I thought you said that how much. I thought that you said that, you said I should say the number again.
- 103 Tr. : No you are not going, I am not going to ask you, you will do it in your book. So for that one no problem. Some one should read question number three. Question number three. This time Chd.11
- 104 Chd.11: About how many more cargoes was unloaded in Monrovia than in Takoradi?
- 105 Tr. : Yes how are you going to do this? Yoo! Yes Chd.5.
- 106 Chd.5: You are going to subtract what, the imported in Monrovia minus Takoradi.
- 107 Tr. : She has said something. Yes Chd.24 is it true or do you have any different answer? Yes
- 108 Chd. : You are going to subtract the number of Takoradi's cargo by Monrovia.
- 109 Tr. : Okay. Yes all what you have said is correct. You have to subtract the number of cargo from eh, Monrovia to what? Takoradi, eh Tema
- 110 Chn : eyɛ Takoradi
- 111 Tr. : eyɛ Takoradi? Yes then you find the difference. Then there is slight something there. Here what you have said is correct but in the book lets find something different. If the question is saying that about how much, about how many. About how many more cargo was unloaded in Monrovia than in Takoradi? Is just what you have said. But here the question is that about how many times. This time I am going to concern, concern myself to the times. All what you have said is correct but we have left with the times. Hein?
- 112 Chn : Yes sir.
- 113 Tr. : This time I should add to make the times in. So if the times is in, how are you going to solve the problem? Yes

- 114 Chn : [Talking together].
- 115 Tr. : About how many times? We will find the difference whereby the times is no, not there. If it's said about how many more cargo was unloaded in Monrovia than in Takoradi. All what you said is what? Correct.
- 116 Chn : [Talking together].
- 117 Tr. : If you subtract you will get about eleven million. Is accepted. But here the question is saying that about how many times. How many times. The times there. I want to be specific. Are we to throw the times off or to put it in the question. If we are putting it in the question, what does this times mean? Yes. Janet will you try? Yes you should speak. Tell me something. You can't? As if teacher is talking all the time. So this time if you don't talk. I'm not going too talk. All, all of us are going to sit down. Because I do not want to talk too much. All the, all what I have said are finished. I don't have anything to say it again. So you are going to talk this time. Alright I will talk only about this. So about how many times? So, eh Yes Chd.7.
- 118 Chd.7: It goes into it thirteen times and Takoradi two times.
- 119 Tr. : No. It's said it means something. When you multiply it you will get the result. So this time I am going to. Eh, I want the multiplication or division aspect. This means that the times there, it means we have to divide the number of what? Yes, eh, Monrovia over what? Takoradi. So Monrovia were how many cargo unloaded? Chd.5.
- 120 Chd.5: Thirteen million.
- 121 Tr. : Thirteen million. What's the next town? Yes Chd 28. The next town.
- 122 Chd 28: Two million.
- 123 Tr. : Two million. Is it the name of a town?
- 124 Chn : Aei! Takoradi
- 125 Tr. : Takoradi. Then how many? Chd.9.
- 126 Chd.9: Two million.
- 127 Tr. : Two million. Over two million. So you should divide. When you divide what should be the answer? Chd.21.
- 128 Chd.21: No response.
- 129 Tr. : Akyem. This eh, Chd 38.Yes.
- 130 Chd 38: Eleven million.
- 131 Tr. : I am not talking about subtraction. All the time you should divide. So if I divide what should be the answer? Yes Chd.59
- 132 Chd.59 : I
- 133 Tr. : I'm talking about the divide. When I divide thirteen million by two million what do I get? Yes all of you take your jotters then you try. You divide thirteen million over two million.
- 134 Chd : You will get seven million.
- 135 Chd : Thirteen point five million
- 136 Tr. : I say take your jotters then you try I am coming round.
- 137 Chd : Wɔ̃bɛ ba abɛ to me o!
- 138 Tr. : I am coming round. Who has finished?
- 139 Chn : [Talking together].

- 140 Tr. : Who has finished.
- 141 Chd : Six point seven
- 142 Tr. : You got what?
- 143 Chd : Four, four million.
- 144 Tr. : Why do you get twelve million?
- 145 Chd : Because I divide two and three.
- 146 Tr. : Okay, two and thirteen is it twelve? Yes if you divide thirteen by two will you get twelve?
- 147 Chn : No please.
- 148 Tr. : So you are totally wrong. What do you get?
- 149 Chd : I got sixty six million
- 150 Tr. : Sixty six million, Why do you get sixty six million?
- 151 Chd : I divided two by thirteen. I got six.
- 152 Tr. : Mhum
- 153 Chd : And I multiplied two by six. I got twelve and I subtract it. I got one. I got ones
- 154 Tr. : Mhum, one then why do you get sixty six? Mum? Yes. What do you get
- 155 Chd : I got twenty six.
- 156 Tr. : Then why do you get twenty six?
- 157 Chd : I multiplied two by one and I got two and I multiplied two by three then I got six.
- 158 Tr. : Hum?. If you multiply, ah you multiply this by this but it is division. But you are talking about multiplication. Chd.8 will you say something?
- 159 Chd : I got six
- 160 Tr. : You got what? Six. you explain to me why do you get six.
- 161 Chd.8: I multiplied by, I divided two by one it could n' t go so I added
- 162 Tr. : Speak louder Chd.8!
- 163 Chd.8: I divided two by thirteen and I get six.
- 164 Tr. : Six. Then six times two is what?
- 165 Chd.8: Six, two is twelve.
- 166 Tr. : Twelve. Then thirteen and twelve what do you do with the rest? You throw it away. Yes Chd.62.
- 167 Chd.62: No response
- 168 Tr. : I saw your hand up. Yes.
- 169 Chd.62: I got six point five.
- 170 Tr. : Why do you get six point five?
- 171 Chd.62: Because two divided by thirteen. You will get six, six the remainder one, two divided by one everybody will get half.
- 172 Tr. : So you want six and half or six point five?
- 173 Chd.62 : Six point five.
- 174 Tr. : Okay. Yes Chd 33.
- 175 Chd 33: I got six remainder one. I divide two million by thirteen million.
- 176 Tr. : Then you got eh twelve, you get six remainder one. Yes, Chd.5.
- 177 Chd.5.: I got six million remainder one

- 178 Tr. : Why do you get that?
- 179 Chd.5.: Because I divided two, two into thirteen and I got six million remainder one.
- 180 Tr. : And you have some. Yes Chd.59 I am here again. Yes Chd.63 you will talk Chd.1 get ready because it's almost your turn. Yes you won't talk. Chd.1.
- 181 Chd.63: Six point five.
- 182 Tr. : How do you get six point five?
- 183 Chn : [Talking together]
- 184 Tr. : Yes.
- 185 Chn : Sir, sir,
- 186 Tr. : Yes Chd.21.
- 187 Chd.21: I got six sixty one
- 188 Tr. : Six remainder one.
- 189 Chd.21: Sixty one.
- 190 Tr. : Why do you get it?
- 191 Chd.21: I divided two by thirteen then I get six. Two times six is twelve and I got one and I put the one here.
- 192 Tr. : Yes
- 193 Chd.21 : I got six.
- 194 Tr. : Yes why do you get six?
- 195 Chd.21 : Because two goes into thirteen is six and remainder one.
- 196 Tr. : So the remainder one you can't do anything with the remainder you have to throw it away. Hein? So you are going to throw one million away. Fine. Yes Chd.24.
- 197 Chd.24: I got six point five
- 198 Tr. : How did you get six point five?
- 199 Chd.24: I divided two million by thirteen million and I got two, I got six, seven, I got seven million and I shared, I shared the one million to the two of them and I got six point five.
- 200 Tr. : Okay. Most of you have done well. Others are not. So we are going to divide to get the how many times. Here, one, two, three, four, five, six. One, two, three, four, five, six. All the zero are gone. Thirteen by two. Two goes into thirteen how many times?
- 201 Chn : Six.
- 202 Tr. : Six times two.
- 203 Tr+Chn: Twelve.
- 204 Tr. : Remainder one. One you add what? Zero and get ten. So five.
- 205 Chn : [Talking together].
- 206 Tr. : So either six point five or six and half.
- 207 Chn : [Talking together].
- 208 Tr. : This means that about how many times. So Monrovia were unloaded six and half times than what? Tema eh, Takoradi. Okay that's all we have for the
- 209 Chn : Keep quiet
- 210 Tr. : Picture graph. Any question on it?
- 211 Chn : No sir,

- 212 Tr. : Then lets talk about the circle graph. Circle graph. We can say is the same as pie chart.
- 213 Chn : [Talking together].
- 214 Tr. : About the level. So lets say.
- 215 Chn : [Talking together].
- 216 Tr. : I am drawing some thing on the board. Here I will choose eh, this is the orange.
- 217 Chn : [Talking together].
- 218 Tr. : Who has taken orange before? Felix haven't you ate orange before? Okay so
- 219 Chn : [Talking together].
- 220 Tr. : We said that it eh this morning when you were coming to school you saw a kind man then you were moving with your friends. She eh the man gave you one orange because the orange the oranges the man was holding were two. So he gave you one. You were four. Then you said that eh, lets say eh Chd.24, Chd 24, eh Chd.66 and Chd.63 They were moving together then Chd.24 said, I asked it from the man so let me have this. So Chd.24 got this. Yes then Chd.66 said okay if Chd.24 has, I also convinced the man, so I will also take this.
- 221 Chn : [Talking together].
- 222 Tr. : Then they said okay no problem. So if you have, the moment they entered the class they saw their best friend Chd.3. he is also here. Then they said if that is the case, Chd.63 take this one. Then lets give this one to Chd.3.
- 223 Chn : [Talking together].
- 224 Tr. : So I am asking you what part was given to Chd.3? what part was given to Chd.3? Yes.
- 225 Chd.3: One part
- 226 Tr. : One part? Is it one part? Yes.
- 227 Chd. : One over eight.
- 228 Tr. : One eighth. One eighth. One eighth was given to Chd.3. What part was taken by Chd.24? Yes.
- 229 Chd.24.: Three.
- 230 Tr. : Three. What part was taken by Chd.63? Yes, yes.
- 231 Chd.44: Seven
- 232 Tr. : What of seven. Your mind is not here. Your mind is far from the class. Is at home. Hein?
- 233 Chn. : Sir, sir
- 234 Tr. : Oh, Albert is at home waiting for the fresh meal. Your madam or your mother was preparing when you were coming. Hein? So you should bring your mind here. Yes what part was taken by Chd.63
- 235 Chd. : Two.
- 236 Tr. : Two over what?
- 237 Chd : Eight.
- 238 Tr. : Two over eight. Okay. Then lets take the whole thing is money. The whole thing is money. Then the sum up of the money. Lets say eight thousand. Then I say how much was taken by Chd.24? How much?

How much? Yes. The moment I say how much, I want to see what? The physical value, physical value. What part or how much was taken by Chd.24? Yes?

- 239 Puip.24: Three thousand
- 240 Tr. : Three thousand. Good. Clap for him.
- 241 Chn. : [Clapping].
- 242 Tr. : Why you are saying that Chd.24 took three thousand? Yes Chd.24 would you try? Try
- 243 Chd.24.: Because I got the biggest.
- 244 Tr. : This means that you have to divide the whole thing by what you took then multiply by the money. So here
- 245 Int. : **Mpa wo kyeew glass nketenkete dee ye de bi maye no ebi mbaa mo dan mu ha?**
- 246 Tr.: **Koraa**
- 247 Int. : **Yedee no nyinaa nkwadaa no awiya ne nyinaa.**
- 248 Tr. : I see. [Inaudible] So you have to divide three over eight by what? Eight thousand. Here you divide this by eight thousand. You get what? Thousand. When you multiply this by this you get what? Three thousand. So Chd.24 took what?
- 249 Tr+Chn.: Three thousand.
- 250 Tr. : So lets look through the book. Then find the circle graph. I have given you two minutes you study
- 251 Chn. : Studying the circle graphs
- 252 Tr. : Chd.26 your mind is not here is at home. You and Davies. He! Chd.44.What part? What part?
- 253 Chn. : Is cocoa
- 254 Tr. : Is cocoa? Yes. What part of the main export was cocoa? What part of the main expert is cocoa? Yes Chd.7.
- 255 Chd.7: One over twelve.
- 256 Tr. : One over twelve. Good. Clap for her.
- 257 Chn. : [Clapping].
- 258 Tr. : You won't say it. When you say clap for the person who is contributing you are not [Clapping]. What's wrong with you? What part of the main export was rubber? Yes rubber.
- 259 Chn. : One part.
- 260 Tr. : One part. One part. Show me rubber. Is this one part? Yes Chd.59.
- 261 Chd.59: Three over twelve.
- 262 Tr. : Three over twelve. Yes. What part of the main export was diamond? Diamond. Yes Chd.1.
- 263 Chd.1: Six over twelve
- 264 Tr. : Is it six over twelve? Chd.63 Chd. 63 diamond
- 265 Chd.63: Two over twelve.
- 266 Tr. : Two over twelve.
- 267 Chn. : Noise.
- 268 Tr. : Coffee
- 269 Chn. : Sir, sir

270 Tr. : Okay I am coming. Yes.
 271 Chd. : One over twelve
 272 Tr. : One over twelve Okay, then I will ask you what part of the
 main export was iron? Chd 32.
 273 Chd 32: Five over twelve
 274 Tr. : Five over twelve. Okay. I am asking you about how much was
 the value of the iron exported? Here is what? About how much? The
 moment you see how much what does it mean? How much what does it
 mean? Chd.9.
 275 Chd.9: It means that the total of the things are bought.
 276 Tr. : How much is the total? Yes Chd.59
 277 Chd.59 : Five thousand.
 278 Tr. : Five thousand. Who told us is five thousand? Yes,
 279 Chn. : Five million, ai!
 280 Tr. : Yes.
 281 Chn. : Five million
 282 Tr. : You are wrong.
 328 Chn. : [Talking together]
 284 Tr. : Okay if there, Yes Chd 29
 285 Chd 29.: How much means the total of the
 286 Tr. : It deals with the physical amount. What's the, how much? The
 amount the person got. So the whole thing is what? The whole thing, The
 total is what?
 287 Chd 29: Twenty thousand.
 288 Tr. : Is it twenty thousand or twenty million?
 289 Chn. : Twenty million.
 290 Tr. : Twenty million. That's the total. Twenty million. That's the
 total. Hein? Is under it total is twenty million.
 291 Chn. : Yes, yes, yes.
 292 Tr. : Then what part was iron? Five over what?
 293 Chn. : Twelve
 294 Tr. : Twelve. So multiply five over twelve by what? Twenty million.
 So you do it. Do it! Yes Chd.65
 295 Chd.65.: You say that we have to multiply it.
 296 Tr. : Yes.
 297 Chn. : Working.
 298 Tr. : Who has finished?
 299 InT. : So eh, what are you going to do? I think the strings, violin,
 guitar
 300 Int. : Guitar?
 301 InT. : Guitar?
 302 Int. : You said guitar
 303 Chn. : Guitar. Then the blast instruments.
 304 Int. : Beats
 305 InT. : Trumpets and other things
 306 Int. : So how to bend it. How to use it in music. How to use the
 tool. And how to add these to the musical instrument.

307 InT. : I think that's all
 308 Int.: So that's all.
 309 InT. : Yes. So you make [Inaudible]
 310 Int. : As for the guitar I have one oh!
 311 InT. : Hein. [Inaudible] I can make it but
 312 Int. : You can bring one. I thought you have a small one. Buy one. I
 will pay. You buy it.
 313 InT. : Okay I will ask the price
 314 Int. : Where? From town
 315 InT. : From town I think Nankani and Hagan and Brothers. They
 have all these things there. But all the instruments if they want the pictures.
 They can't find, they can find all in P4 reading book. All the instruments are
 there. The flute the others.
 316 Int. : Then I will show them the place
 317 InT. : Okay, No problem. Emifa. How is life?
 318 Chn. : Talking and working
 319 Tr. : Yes. Who has finished?
 320 Chn. : [Talking together]
 321 Tr. : Chd 27
 322 Chd 27 I got five million because I times two
 323 Tr. : I Multiplied
 324 Chn. : I multiplied two by two and I got two remainder one and I
 multiplied three by one and I got five. I times, I multiplied one of these and I
 got five.
 325 Tr. : So you are beating the bush. Don't you think that I shall lost.
 Yes
 326 Chd. : I got two because five over twelve multiplied by thirteen
 million. five goes into five is one, five goes into thirty is four. Five cannot
 goes into twelve. So the four I used two to cancel the four and two to cancel
 the six. so I got six multiplied by two which is twelve million.
 327 Tr. : Yes Chd.24. Tell me what you got?
 328 Chd.24.: Sir I have no idea.
 329 Tr. : Oh! Five over twelve multiplied by twenty. No idea
 330 Chd.24: Yes
 331 Tr. : Of course. Yes, yes Chd 42
 332 Chd 42.: Twelve million
 333 Tr. : How did you get twelve million?
 334 Chn. : I multiplied by twelve then I got [Inaudible]
 335 Chn : [Talking together]
 336 Chd. : Keep quiet
 337 Tr. : Yes. Chd.59 explain. Yes
 338 Chd.59.: I got ten million
 339 Tr. : You got what?
 340 Chd.59: Ten million
 341 Tr. : Hey! Chd.59. You got what?
 342 Chn. : Oh ho!
 343 Tr. : You got what?

- 344 Chn. : [Laughing].
 345 Chd.59: Ten million.
 346 Tr. : Ten million?
 347 Chn. : Yei!
 348 Tr. : Yes.
 349 Chd. : I got four million.
 350 Tr. : Four million. The whole class you are all wrong.
 351 Chn. : Sir, sir.
 352 Tr. : Yes
 353 Chn. : Sir seven million.
 354 Tr. : You got what?
 355 Chn. : Eight point two million.
 356 Tr. : Eight point two million.
 355 Chn. : [Inaudible]
 358 Tr. : You are insulting him. Chd.5.
 359 Chn : I got twenty five million
 360 Tr. : You are wrong
 361 Chn. : Sir, sir
 362 Tr. : Chd.9
 363 Chd.9.: I got thirty million
 364 Tr. : Thirty million. Hum.
 365 Chd. : Sir one million
 366 Chd : What do you got?
 367 Tr. : Yes
 368 Chn. : **Me nya** twelve million
 369 Tr. : Yes
 370 Chn. : Sir, sir.
 371 Tr. : Yes
 372 Chn. : One thirty million
 373 Tr. : Yes
 374 Chd. : Thirty million
 375 Tr. : Yes Chd 38
 376 Chd.38.: Twenty four million
 377 Tr. : Yes Chd.52
 378 Chd.52: Twelve million
 379 Tr. : Yes
 380 Chn : Fifteen million
 381 Tr. : Yes
 382 Chn. : Two million
 383 Tr. : Yes
 384 Chn. : Ten
 385 Tr. : Yes
 386 Chn. : Four million. Five million
 387 Tr. : He! Chd.66.
 388 Chd.66: eyε eleven million
 399 Tr. : Yes Chd.66
 400 Chd.66.: [Talking together]

401 Tr. : Yes. Yes!
 402 Chn. : Five million
 403 Tr. : Yes
 404 Chn. : Thirty million
 405 Tr. : Yes
 406 Chn. : Ae! Twenty four million
 407 Tr. : Yes
 408 Chn. : Sixteen million. Twenty eight million, twenty four million.
 409 Tr. : Chd.67.
 410 Chd.67.: Seven and eighteen
 411 Tr. : Chd.7 eh Chd.22.
 412 Chn. : [Talking together].
 413 Chd. : Yes Chd 32
 414 Chd 32: Five million
 415 Tr. : Chd.63
 416 Chd. : Three million
 417 Tr. : Yes Chd.45
 418 Chd.45: Four million
 419 Tr. : Yes
 420 Chd. : Twelve million
 421 Tr. : Yes
 422 Chd. : Thirty million
 423 Tr. : Yes
 424 Chd. : Five million
 425 Tr. : Yes
 426 Chd. : Three million
 427 Tr. : Yes
 428 Chd. : Seventeen million
 429 Tr. : Yes
 430 Chd. : Five million
 431 Tr. : Yes
 432 Chn. : Sixteen million
 433 Tr. : Yes
 434 Chd. : Ten , five million
 435 Tr. : Yes
 436 Chd. : Two million
 437 Tr. : Yes
 438 Chd. : Sir, teacher forty million
 439 Tr. : Yes
 440 Chd. : Four million
 441 Tr. : Yes
 442 Chd. : Five million
 443 Tr. : Yes
 444 Chd. : Twenty five million
 445 Tr. : Yes Borfo nkatea Yes
 446 Chd. : Fifteen
 447 Tr. : Yes

- 448 Chd : Nine million
- 449 Tr. : Yes
- 450 Chd. : Two point five million
- 451 Tr. : Yes (Lost control of the lesson) What follows is chaos and disorder.
- 452 Chd. : Three million
- 453 Chd : Two hundred cedis
- 454 Chd. : One twenty million
- 455 Chd : Three million
- 456 Chd : Thirteen million
- 457 Chd : **Si obia aka bi**
- 458 Chd : Twenty five million
- 459 Chd : Ten million
- 460 Chn. : Six million
- 461 Tr. : I thought you will think about it
- 462 Chd. : Six million
- 463 Chd : Three point five million
- 464 Chn. : [Laughing]
- 465 Chd : Four million
- 466 Chd. : Six million
- 467 Chn : [Talking together]
- 468 Chn : **Sir obia entumi wɔha**
- 469 Tr. : **Hey!**
- 470 Chn. : **Chd.24 se wɔ betumi?**
- 471 Tr. : We have said what you can so I do not want any body. I am not I do not want to see anybody standing up because all of you have talked. First what we are going to do is that lets divide. Here, twelve and twenty. What number can divide twelve and twenty? Chd.24
- 472 Chd.24.: You divide
- 473 Tr. : Yes
- 474 Chd.24.: Two
- 475 Tr. : Two, too small. Okay we shall take two. Two goes in six. Two goes in here ten. What number again? Yes
- 476 Chn. : Four
- 477 Tr. : No Four cannot go into six. Yes
- 478 Chn : Two
- 479 Tr. : Two. At first I liked four. Two here three five. So five times five million is what? Twenty five million. So twenty five million over what?
- 480 Chn. : Three
- 481 Tr. : Okay. Then lets divide this three by twenty five. Three goes into twenty five how many times? Yes
- 482 Chn. : Eight
- 483 Tr. : Eight. Eight times three is what?
- 484 Tr+Chn.: Twenty four
- 485 Tr. : Twenty four minus, twenty five minus twenty four is what?
Chd.24.
- 486 Chn. : One

- 487 Tr. : One. Then you bring this, it becomes ten. Three goes into it how many times?
- 488 Chd.24: Three
- 489 Tr. : Three, times three. Nine Bring this zero. three, three, three. So is eight three, three, three. So that is the answer. So is three recurring. Eight point three reoccurring. Is eight three, three, three, three, three recurring.
- 490 Chn. : Three, three, three, three
- 491 Tr. : Yes three, three, three recurring. That is the answer. Yes if you have any question you can ask me.
- 492 Chn. : Ae!
- 493 Tr. : No question?
- 494 Chn. : No sir.
- 495 Tr. : Chd 32, Chd 37 bring the Maths books. Today we are not going to do the mental because this is the beginning of the topic. So tomorrow we shall do the
- 496 Chn. : Mental
- 497 Tr. : Mental. So bring the Maths books.

APPENDIX 5(11) TD English

SCHOOL : MAKARANTA BORBOFO
 CLASS : P3
 TEACHER : "TD"
 SUBJECT : ENGLISH LANGUAGE
 TOPIC : MR BOAMAH'S SHOP
 DATE : 29TH FEBRUARY, 1996

- 1 Tr. : What class is this?
- 2 Chn. : P3
- 3 Tr. : Em, we are now on unit 6, English reading. Reading. Okay. Before we start with the reading, we have to go through some of the new words which are in unit six. So what we have to do is. We have to read through the new words. Know the meanings of the new words. Then know how to use them in sentences before we start with the reading. Okay, number one. The new word. What is this called?
- 4 Chd. : Shopkeeper.
- 5 Tr. : Shopkeeper all of you..
- 6 Chn. : Shopkeeper.
- 7 Tr. : Okay, shopkeeper, eh, Emma was quiet good, She has been able to tell us shopkeeper. What's this word? Ruth.
- 8 Ruth. : Shop.
- 9 Tr. : Shop all of you.
- 10 Chn. : Shop.
- 11 Tr. : Shop.
- 12 Chn. : Shop.
- 13 Tr. : Shop.
- 14 Chn. : Shop.
- 15 Tr. : Shop.
- 16 Chn. : Shop.
- 17 Tr. : Okay, eh, what about this word? It's eh, the name of a town. Sokode, all of you.
- 18 Chn. : Sokode.
- 19 Tr. : Sokode.
- 20 Chn. : Sokode.
- 21 Tr. : Is a name of a town. Okay. Then what's this word? Eh, Adu
- 22 Adu. : Rest.
- 23 Tr. : No, s-e-l-l-s, s-e-l-l-s, yes Sekyere
- 24 Sekyere: Sells
- 25 Tr. : Sells all of you.
- 26 Chn. : Sells
- 27 Tr. : Clap for him
- 28 Chn. : [Clapping]
- 29 Tr. : Sells, sells, sells, all of you.
- 30 Chn. : Sells

- 31 Tr. : Sells
 32 Chn. : Sells
 33 Tr. : What's this word? Eh Adu Grace..
 34 Grace. : Soap.
 35 Tr. : Soap all of you.
 37 Chn. : Soap
 38 Tr. : Soap
 39 Chn. : Soap
 40 Tr. : Soap
 41 Chn. : Soap
 42 Tr. : What about this word? Eh Lydia.
 43 Lydia. : Lice
 44 Tr. : Again
 45 Lydia. : Lice
 46 Tr. : Rice
 47 Chn. : Rice
 48 Tr. : Rice
 49 Chn. : Lice.
 50 Tr. : No, no, no. It is /r/ /r/ rice. It is not /l/ /l/ /l/ lice.
 51 Chn. : Rice/lice [simultaneous production: one group saying rice and the other lice] followed by Chn. talking together.
 52 Tr. : Keep quiet. It is not lice.
 53 Chn. : Talking together.
 54 Tr. : It is /rh /rh/ rice, r,r, rice, rice. All of you.
 55 Chn. : Rice.
 56 Tr. : Rice.
 68 Chn. : Rice.
 59 Tr. : Rice.
 60 Chn. : Rice.
 61 Tr. : Rice.
 62 Chn. : Rice.
 63 Tr. : Rice.
 64 Chn. : Rice.
 65 Tr. : Rice.
 66 Chn. : Rice.
 67 Tr. : So, whenever you are pronouncing rice do make /l:/ like. No, no, no. It's r, r, r, rice, rice, right okay. What about this one? You have rice, rice, and then right. These are
 68 Chn. : **Wo nte Borofo?** (amid talking together)
 69 Tr. : Okay, eh, Hanna do you want to tell us that word. He! Okay Emma.
 70 Emma. : Tin.
 71 Tr. : Tin. Tin. All of you.
 72 Chn. : Tin.
 73 Tr. : Tin.
 74 Chn. : Tin.
 75 Tr. : Tin. Tin. Tin. Okay, eh, what about this one?

76 Chn. : Sir, sir.
77 Tr. : Eh, Osafo waa, Sarfo waa Margaret. Yes.
78 Margaret: Lack.
79 Tr. : He!
80 Margaret: Lack.
81 Tr. : No, no, no . This one. This one he!
82 Margaret: Lack.
83 Tr. : No. [Points to another child]
84 Chd. : Milk
85 Tr. : Milk
86 Chn. : Milk
87 Tr. : Milk
88 Chn. : Milk
89 Tr. : Milk
90 Chn. : Milk
91 Tr. : Milk
92 Chn. : Milk
93 Tr. : What about this word? Em, Lydia.
94 Chn. : Packet.
95 Tr. : Packet all of you.
96 Chn. : Packet
97 Tr. : Packet
98 Chn. : Packet
99 Tr. : And who can tell us this one.
100 Chn. : [Talking together].
101 Tr. : If this is packet. Yes this one. Yes.
102 Chn. : [Talking together].
103 Tr. : Eh, Mhum.
104 Chn. : [Inaudible]
105 Tr. : No. Who can tell us? Yes Adu, Adu, Yes that word is
what?
106 Chn. : Four
107 Tr. : No, eh, yes.
108 Chn. : [Talking together].
109 Tr. : Okay, nobody, Okay. You want to try come here.
Emma says she wants to try . Let's hear him if he will be able to get it
correct. Yes
110 Emma : Can.
111 Tr. : Can! can! εhe!
112 Emma. : Can
113 Tr. : Aha!
114 Emma. : Can
115 Tr. : Can! What's this? /d/, /d/, /d/.
116 Emma. : Can
117 Tr. : Can Yes Sekyere come and try.
118 Sekyere: Candle
119 Tr. : Candle, Candle all of you.

120 Chn. : Candle
 121 Tr. : Clap for him. Clap for him
 122 Chn. : ([Clapping])
 123 Tr. : Okay, candle. You know candle. If you go to church.
 Roman, Roman Catholic church, you see that, they light what?
 Praying. Okay.
 124 Chn. : [Talking together].
 125 Tr. : Ma. This word, I wanted to call the word for you but I
 want somebody who can try. Who can try that word? That word. I
 nearly said it. [Teacher laughs] You see this one, Adu.
 126 Chn. : [Talking together].
 127 Tr. : ehe! Yes come, come, come and call it. Yes if you will
 get it. Let's hear him.
 128 Adu. : Market.
 129 Tr. : eh!
 130 Adu. : Market
 131 Tr. : Ma, ma, ma, ma
 132 Chn. : Ma, ma
 134 Adu. : Matches
 135 Tr. : Matches, matches, matches, matches. Very good.
 136 Chn. : [Talking together]
 137 Tr. : Clap for him, clap for him.
 138 Chn. : [Clapping]
 139 Tr. : Matches fine. Now the. As for this word if you are able
 to say it I will put you at my back. Yes this one. This one yes. ehe!
 140 Chd. : Pen.
 141 Tr. : That thing that you put letters inside. The thing you put
 letters inside.
 142 Chn. : [Talking together].
 143 Tr. : Many don't know. Listen, listen. Okay, you put your
 letter inside before you post. They sell it in shops. ehe!
 144 Chd. : [Inaudible :Chn. talking together]
 145 Tr. : No, no, no. Listen, listen, okay nobody. Eh, Foster you
 want to try. Come and try. Yes, yes, yes this one.
 146 Chn. : [Talking together]
 147 Tr. : Yes, who wants to try?
 148 Chd. : [Inaudible Chn. talking together]
 149 Tr. : Eh, no, no, no.
 150 Chn. : [Talking together]
 151 Tr. : Yes Hanna come, come. Come and try if you can get it.
 Okay, let's hear Hanna. Hanna says she is going to get it. Okay.
 152 Hanna. : Lastic[elastic]
 153 Tr. : Oh! Say it loud. say it loud.
 154 Hanna. : Lastic[elastic]
 155 Tr. : No, no. Okay. She has tried. Yes who can try? Adu,
 Lydia can't you? This one. Okay let me, let, let
 156 Chd. : Meka [amid noise]

- 157 Tr. : okay, keep quiet. Let me call it for you to hear.
'Envelope'. Envelope all of you.
- 158 Chn. : Envelope
- 159 Tr. : Envelope
- 160 Chn. : Envelope
- 161 Tr. : Envelope
- 162 Chn. : Envelope
- 163 Tr. : When you write. When you want to write a letter, you go to the shop and buy an envelope or at the post office. If you go to the post office they sell all these things there. So you buy your envelope and put your letter inside before you address the person's name. Then post it.
- 164 Chn. : [Talking together]
- 165 Tr. : Envelope., all of you!
- 166 Chn. : Envelope.
- 167 Tr. : Now what word is this?
- 168 Chn. : [Talking together]
- 169 Tr. : This one, this one.
- 170 Chd. : Back
- 171 Tr. : This one you see. It is always at the back of your book.
this one.
- 172 Chd. : Book
- 173 Tr. : No, no, no. This one. No, no, no..
- 174 Chn. : [Talking together]
- 175 Tr. : This one, this one. This one is here.
- 176 Chn. : (Talking together)
- 177 Tr. : You see!
- 178 Chd. : **Hwan na etwere ye?**
- 179 Tr. : You see!
- 180 Chn. : [Talking together]
- 181 Tr. : **Aha**, Yes.
- 182 Chn. : Exercise
- 183 Tr. : Exercise. Exercise all of you.
- 184 Chn. : Exercise
- 185 Tr. : Exercise
- 186 Chn. : Exercise
- 187 Tr. : You see. Oh very nice, very nice. Eh
- 188 Chn. : [Talking together]
- 189 Tr. : And the last one. I hear that . Is alright. I just heard you. Eh, Mary Mensah says she is going to tell us
- 190 Chn. : [Talking together]
- 191 Tr. : Keep quiet. Mary Mensah. This is for Mary Mensah.
- 192 Chn. : **Woboa eh! Woboa!** [Amid noise]
- 193 Tr. : Mary Mensah tell us.
- 194 Mary. : Book
- 195 Tr. : **εhe!**
- 196 Mary. : Book

197	Tr.	:	Yes, yes
198	Chn.	:	[Talking together]
199	Tr.	:	<u>Book.</u> All of you.
200	Chn.	:	<u>Book</u>
201	Tr.	:	<u>Book</u>
202	Chn.	:	<u>Book</u>
203	Tr.	:	<u>Book</u>
204	Chn.	:	<u>Book</u>
205	Tr.	:	<u>Book</u>
206	Chn.	:	<u>Book</u>
207	Tr.	:	<u>Book</u>
208	Chn.	:	<u>Book</u>
209	Tr.	:	Okay let's go over
210	Chn.	:	<u>Book</u> [and talking together]
211	Tr.	:	Let's go over, let's go over. Keep quiet. [Points to shopkeeper]
212	Chn.	:	<u>Shopkeeper</u>
213	Tr.	:	<u>Shopkeeper</u>
214	Chn.	:	<u>Shopkeeper</u>
115	Tr.	:	<u>Shop</u>
116	Chn.	:	<u>Shop</u>
117	Tr.	:	<u>Sokode</u>
218	Chn.	:	<u>Sokode</u>
219	Tr.	:	<u>Sells</u>
220	Chn.	:	<u>Sells</u>
221	Tr.	:	<u>Soap</u>
221	Chn.	:	<u>Soap</u>
213	Tr.	:	<u>Rice</u>
224	Chn.	:	<u>Rice</u>
225	Tr.	:	<u>Tin</u>
226	Chn.	:	<u>Tin</u>
227	Tr.	:	<u>Milk</u>
228	Chn.	:	<u>Milk</u>
229	Tr.	:	<u>Packet</u>
230	Chn.	:	<u>Packet</u>
231	Tr.	:	<u>Packet</u>
232	Chn.	:	<u>Packet</u>
233	Tr.	:	<u>Candle</u>
234	Chn.	:	<u>Candle</u>
235	Tr.	:	<u>Candle</u>
236	Chn.	:	<u>Candle</u>
237	Tr.	:	<u>Matches.</u>
238	Chn.	:	<u>Matches</u>
239	Tr.	:	<u>Envelope.</u>
240	Chn.	:	<u>Envelope</u>
241	Tr.	:	<u>Exercise.</u>
242	Chn.	:	<u>Exercise.</u>

243 Tr. : Book.
 244 Chn. : Book.
 245 Tr. : Book.
 246 Chn. : Book.
 247 Tr. : Shopkeeper.
 248 Chn. : Shopkeeper
 249 Tr. : Matches.
 250 Chn. : Matches
 251 Tr. : Shop
 252 Chn. : Shop
 253 Tr. : Envelope.
 254 Chn. : Envelope
 255 Tr. : Sokode
 256 Chn. : Sokode
 257 Tr. : Exercise
 258 Chn. : Exercise
 259 Tr. : Book
 260 Chn. : Book
 261 Tr. : Soap
 262 Chn. : Soap
 263 Tr. : Sells
 264 Chn. : Sells
 265 Tr. : Tin
 266 Chn. : Tin
 267 Tr. : Rice
 268 Chn. : Rice
 269 Tr. : Milk
 270 Chn. : Milk
 271 Tr. : Packet.
 272 Chn. : Packet
 273 Tr. : Candle.
 274 Chn. : Candle
 275 Tr. : Now I am going to put the pointing stick on the new word If you know it you raise up your hand and then say it. Don't be shouting eh!
 278 Chn. : Yes sir
 279 Tr. : Okay, em what is this word? Yes I want to see more hands. More hands. This one, this one. Martha come and tell us. Come, come, come or Salomey you want to try? Come Sally! Come.
 280 Chn. : [Talking together]
 281 Tr. : Come
 282 Salomey: Sokode
 283 Tr. : No, no. Portia.
 284 Chn. : [Whispering: Sokode, Sokode]
 285 Tr. : Come
 286 Portia : Milk
 287 Tr. : No [and laughs]

289 Chn. : [Laughing and talking together]
 290 Tr. : Eh, Sekyebea wants to tell us. Come. Sekyebea
 291 Sekyebea: Soap
 292 Tr. : Soap all of you.
 293 Chn. : Soap
 294 Tr. : Soap
 295 Chn. : Soap
 296 Tr. : Okay
 297 Chn. : [Talking together]
 298 Tr. : What about this word Ben
 299 Chn. : Sir, sir [Talking together])
 300 Ben : Carpet
 301 Tr. : Say it again
 302 Chn. : Packet
 303 Tr. : No is not carpet.
 304 Chn. : Sir, sir [Talking together])
 305 Tr. : Yaw Boadu
 306 Chn. : Packet
 307 Tr. : Packet all of you
 308 Chn. : Packet
 309 Tr. : Packet
 310 Chn. : Packet
 311 Tr. : Packet
 312 Chn. : Packet and [Talking together]
 313 Tr. : Adashie do you want to try this one?
 314 Chn. : [Laughter and talking together]
 315 Tr. : Okay. Kojo Frank wants to tell us. Kojo come.
 316 Chn. : [Talking together]
 317 Tr. : What word is it?
 318 Kojo. : Candle
 319 Tr. : Candle. All of you.
 320 Chn. : Candle
 321 Tr. : Candle
 322 Chn. : Candle
 323 Tr. : Candle
 324 Chn. : Candle
 325 Tr. : Okay
 326 Chn. : Sir, sir, sir [Talking together]
 327 Tr. : Ebeneza
 328 Ebeneza: Matches
 329 Tr. : No! Oh! He is correct! He is correct. Clap for him
 330 Chn. : [Clapping]
 331 Tr. : Matches all of you.
 332 Chn. : Matches
 334 Tr. : Matches
 335 Chn. : Matches

336 Tr. : Okay. Eh, Portia tell us this one. Come and tell us.
Portia yes

337 Chn. : [Talking together].

338 Tr. : Yes

339 Chn. : Shopkeeper.

340 Tr. : Shopkeeper all of you

341 Chn. : Shopkeeper

342 Tr. : Shopkeeper

343 Chn. : Shopkeeper

344 Tr. : Okay, now we are going over it again and then we are
going to learn the meanings of these words. Let's go over it once.

345 Tr. : Shopkeeper

346 Chn. : Shopkeeper

347 Tr. : Shop

348 Chn. : Shop

349 Tr. : Sokode

350 Chn. : Sokode

351 Tr. : Sells

352 Chn. : Sells

354 Tr. : Soap

356 Chn. : Soap

357 Tr. : Rice

356 Chn. : Rice

357 Tr. : Tin

358 Chn. : Tin

359 Tr. : Milk

360 Chn. : Milk

361 Tr. : Packet

362 Chn. : Packet

363 Tr. : Packet

364 Chn. : Packet

365 Tr. : Candle

366 Chn. : Candle

367 Tr. : Matches.

368 Chn. : Matches

369 Tr. : Envelope.

370 Chn. : Envelope

371 Tr. : Exercise.

372 Chn. : Exercise.

373 Tr. : Book.

374 Chn. : Book.

375 Tr. : Now we are going to go over it. Em shopkeeper.
What's the meaning of shopkeeper?

376 Chn. : [Talking together].

377 Tr. : Somebody who keeps a shop. Somebody who keeps a
shop is called what? A shopkeeper.

378 Chn. : [Talking together].

- 379 Tr. : Mr Boamah is a shopkeeper. He has a . So when you talk of shopkeeper, shopkeeper is somebody who keeps a shop. who is keeping a shop at Mbεase here? A shop. Who has got a shop? Who sells sugar gari eh, who has got it? What's the name?
- 380 Chd. : Mr Boadi.
- 381 Tr. : Mr Boadi
- 382 Chn. : Mr Boadi
- 383 Tr. : He has got a shop here. So he sells many things. That man is a shopkeeper. Shopkeeper, somebody who keeps a shop. Okay! Then number two
- 384 Chn. : [Talking together].
- 385 Tr. : Where we, where we keep rice and other items and we sell to other people is called shop. Shop. We sell . We keep so many things like rice, like milk, like candle and many things and so on and then we sell to people. That is, that room where we keep all these things is shop. We call shop.
- 386 Chn. : [Talking together].
- 387 Tr. : Somebody may have a kiosk. All these things may be in it. That one too is a shop. Okay!
- 388 Chn. : Silent
- 389 Tr. : Then Sokode. I told you that is a name of a town. Is the name of a town like Mbεaase. Mbεaase is a name of a place. Here. And then we have Sekondi. We have Goaso and the rest. They are all names of towns in Ghana. So Sokode is also a town in Ghana. Sell, sell, sell. When you buy something from someone he is selling it to you
- 390 Chd. : Saa!
- 391 Tr. : Mhum. When you buy something from somebody, let's say I want to buy this pen now. If Gyamfua is keeping this one. She has it and gives it to me, collect money which means Gyamfua has sold this one to me and I have paid for it. Sell, selling something. You sell okay. Then we move to soap. We use it to wash our body and then, I said we use it wash our clothes eh!
- 392 Chn. : Yes si
- 393 Tr. : Okay, name me one soap you know. Name me. What soap do you know? Give me example of soap. Example of soap
- 394 Chn. : [Talking together].
- 395 Tr. : εhε!
- 396 Chd. : Key soap
- 397 Tr. : Key soap. εhε!
- 398 Chd. : Key soap
- 399 Tr. : Key soap Key soap. We use it to wash our clothes. εhε! That's key soap. Okay. Now. Then we have what? Rice. And everyday you have been chopping rice, so you know rice.
- 400 Tr. : Yes sir.
- 401 Chn. : And then tin, tin, all of you.
- 402 Chn. : Tin
- 403 Tr. : Tin

404 Chn. : Tin
 405 Tr. : This is a tin. This one made of metal is a tin and you know that we have milk which are in tins. Milk are in tins. So we have tins of What? Milk. Tins if milk.
 406 Chn. : [Talking together].
 407 Tr. : Then packet.
 408 Chn. : [Talking together].
 409 Tr. : We have packets of what? Candle and then packets of what? Milk, packets of sugar The box in which all these are kept are what? Packet, packets eh!
 410 Chn. : Silent
 411 Tr. : We have candle, candles are used by eh, priest. Priest of the Roman Catholic Church, and then Anglican. And then at the same time in the night if you don't have lamp, and then you don't have kerosene, you buy what? Candle and the lie, you light it in the night so that it will let you see things. That's candle. Then we have what?
 412 Chn. : Matches.
 414 Tr. : You know matches. He!
 413 Chn. : Yes sir.
 414 Tr. : Ya, and then envelope, envelope too we keep letters in it and then post it to people in Ghana and then outside Ghana. Then exercise. We have exercise book. Exercise book like the one that I showed it to you. Exercise book, This one. You see that is written at the back
 415 Chn. : Yes sir.
 416 Tr. : Is written at the back 'exercise book' In which you do the what? Exercise. We give you and then you do it inside. So this one is what? Exercise book. You do the exercise here. The same thing, the same story isn't it?
 418 Chn. : Yes sir.
 419 Tr. : Eh, we are going to use them to form sentences and see if you can do it.. My father is a shopkeeper . My father is a shopkeeper.. I saw Mr. Boadi the shopkeeper at Mbease. I saw Mr. Boadi the shopkeeper at Mbease. Who can use shop, shopkeeper to form one sentence? Emma can you try it for us? You can, try it, try it.
 420 Emma. : Mr.
 421 Tr. : Mr.
 422 Chn. : Mr Daddy
 423 Tr. : Mr, eh, hein? Yes Mr!
 424 Chn. : Mr Dada
 421 Tr. : Is.
 422 Emma. : Shopkeeper
 423 Tr. : Is a shopkeeper.
 424 Emma. : Is a shopkeeper
 425 Tr. : Mr Dada is a shopkeeper Yes Hanna wants to try. Hanna wants to try. Shopkeeper. Yes..
 426 Hanna. : Mr. My first sister is shop

427 Tr. : Is a
 428 Chn. : Is a shopkeeper
 429 Tr. : Shopkeeper
 430 Chn. : Shopkeeper
 431 Tr. : Shopkeeper all of you.
 432 Chn. : Shopkeeper
 433 Tr. : Shop
 434 Chn. : Shop
 435 Tr. : Shopkeeper
 436 Chn. : Shopkeeper
 437 Tr. : Shopkeeper
 438 Chn. : Shopkeeper [followed by chn. talking together]
 439 Tr. : Yes tell us, tell us. Ehein!
 441 Chd. : Uncle is a shopkeeper
 442 Tr. : My uncle is a shopkeeper.
 443 Chd. : My uncle is a shopkeeper
 444 Tr. : Good. She says her uncle is a shopkeeper. Who can try again? Who can give us another one? Shopkeeper, yes.
 445 Chd. : Mr. Boateng is a shopkeeper
 446 Tr. : Mr. Boateng is a shopkeeper. Okay. We thank you. Then shop, shop. Yes who can use shop. Let me try one. I saw Mr Boamah in the shop I saw Mr Boamah in the shop. Yes who can try and give us one? Yes tell us Gyamfua
 447 Gyamfua: Mr Boamah is a shopkeeper
 448 Tr. : That is number one. Mr Boamah is a shopkeeper We thank you very much. Shop, shop, inside the shop. I saw many things inside the shop. I saw many things inside the shop. Yes who can try? Yes Grace, Oh Lydia. Yes. Shop, try, try, try and let's hear you. Try.
 449 Chn. : [Talking together].
 450 Tr. : I saw Mr Koranteng in the shop. I saw Mr Franklin in the shop. Yes Adu, Adu wants to try. Yes.
 451 Chn. : Mr Thomas is a shopkeeper
 452 Tr. : Mr Thomas is a shopkeeper. The same thing that you have said. That's number one, but we want to use shop. The shop alone. Yes
 453 Chn. : Mr, Mr Dekyi is a shop.
 454 Tr. : Is in the shop
 465 Chn. : Is in the shop
 466 Tr. : Mr Dekyi is in the shop. There are there are books in the shop. There are books in the shop. Yes you want to tell us something.
 467 Chd. : Mr. Kofi is a shopkeeper.
 468 Tr. : That is number one. We don't want to use the shopkeeper again. We don't want to use the shopkeeper again We have understood shopkeeper. We are using shop, shop, shop. Mr., Mr Boateng is in the shop. There are many books in the shop. I bought rice in the shop.

- 469 Chn. : Yɛ nyinaa yɛ nnim [amid talking together and laughter].
- 470 Tr. : Listen, I bought rice in the shop. Yes.
- 471 Chd. : Ma me nka
- 472 Tr. : Akua come. Yes.
- 473 Chn. : [Talking together].
- 474 Tr. : Let her try. She is trying. She is here to try. Yes
- 475 Akua. : My sister
- 476 Chn. : [Laughing]
- 477 Tr. : My sister. Mhum!
- 478 Akua. : My sister is Adowa
- 479 Tr. : My sister is in the
- 480 Akua. : My sister is in the adwo
- 481 Tr. : Oh no. In the shop
- 482 Akua. : In the shop.
- 483 Tr. : Eh, try again. ɛhɛ!
- 484 Akua. : My
- 485 Tr. : Sister.
- 486 Chn. : My sister is in the shop.
- 487 Tr. : Say it loud.
- 488 Chn. : My. my sister is in the shop!
- 489 Tr. : Good. My sister is in the shop. Okay. She says her sister is in the shop. I want somebody to try. Yes, who? Who will help us? Yes Dekyi.
- 490 Dekyi. : My mother is in the shop.
- 491 Tr. : My mother is in the shop. My mother is in the shop. Adusei Grace do you want to try? Yes.
- 492 Grace. : My brother is in the shop.
- 493 Tr. : So she says her brother is in the shop. Now we have got shop. Then we return to Sokode. I went to Sokode last week. My father is staying at Sokode. My mother is working at Sokode. Sokode Yes. Lydia tell us, tell us.
- 494 Lydia. : My mother is Sokode.
- 495 Tr. : My mother is in, My mother is at Sokode
- 496 Lydia. : My mother is at
- 497 Tr. : At
- 498 Lydia. : At
- 499 Tr. : My mother is at Sokode.
- 500 Lydia. : My mother at Sokode.
- 501 Tr. : My mother is
- 502 Chn. : My mother is at Sokode
- 503 Tr. : Good that means your mother is there. Your mother is there. Yes, yes.
- 504 Chd. : My father is in, in at Sokode
- 506 Tr. : Don't say in at
- 507 Chd. : Is at
- 508 Tr. : Is at

- 509 Chn. : My father is at Sokode.
510 Tr. : Okay. We come to you. Yes you too
511 Chd. : My brother is at Sokode.
512 Tr. : If not your brother it will be your sister, your mother.
Okay Ben. Sells, sells
513 Ben. : Sells
514 Tr. : My sister sells brooms. My sister sells brooms at
Kumasi Kejetia. My mother is selling. My mother is selling eh, sugar at
Kumasi
515 Chd. : My mother sells
516 Tr. : My brother sells milk at Mbease
517 Chn. : [Talking together].
518 Tr. : Yes who can try? Sells, sells, sells. My father sells at
Mbease
519 Chn. : [Talking together].
520 Tr. : My uncle sells at Sekondi
521 Chn. : [Talking together].
522 Tr. : eh! She sells milk at Mbease. Adwowa sells brooms
at Kejetia
523 Chd. : Oduro yare...
524 Tr. : Yes who can give us one? Just one sentence
525 Chn. : [Talking together].
526 Tr. : sells. My father sells at Mampong
527 Chn. : [Talking together].
528 Tr. : She sells many things at Kumasi. She sells many things
at Kejetia. Emma won't you try? Come, come, come. Yes try. Mhum?
529 Emma. : His brother sells is Kumasi
530 Tr. : My brother sells at Kumasi.
531 Emma. : My brother sells at Kumasi
532 Tr. : Okay he sells at Kumasi
533 Chn. : [Talking together].
534 Tr. : Adu Grace sells milk. Adu Grace sells milk at Mbease.
Adu Grace sells milk at Mbease. Yes.
535 Chd. : Adu Grace sells milk at tomatoes.
536 Tr. : No, no, no. Adu Grace sells tomatoes at Mbease
537 Chd. : Adu Grace sells
538 Tr+Chn.: Tomato
539 Chd. : Tomato
540 Tr. : At Mbease
541 Chd. : At Mbease
542 Chn. : [Talking together].
543 Tr. : She says Adu Grace sells tomatoes at Mbease
544 Chn. : [Talking together].
546 Tr. : Yes Emma come.
547 Chn. : [Talking together].
548 Emma : Akua sells at garden eggs

549 Tr. : At
 550 Emma. : Akua sells at garden eggs
 551 Tr. : Akua sells garden eggs
 552 Emma. : Akua sells garden eggs
 553 Tr. : Akua sells garden eggs. Okay then let's go to soap. I wash my clothes with key soap. I wash my clothes with key soap
 554 Chn. : I wash my clothes.
 555 Tr. : I wash my clothes with key soap and I wash my body. I clean my body with, with alata soap. Eh, listen. I use alata soap to wash my body. Yes soap. Mr. Boamah sells soap at his shop.
 556 Chn. : [Talking together]
 557 Tr. : Mr. Boamah sells soap at his shop.
 558 Chn. : Mr. Boamah soap, Mr. Boamah soap
 559 Tr. : I know Mr. Boamah is a shopkeeper but what does he sell? He sells soap in his shop. He sells soap in his shop. Kofi sells soap at Kejetia. Okay, eh, Mary rice ehin?
 560 Mary. : My mother rice cook. My mother cook rice at Besease
 561 Tr. : My mother cook rice at Besease
 562 Mary. : My mother cook rice is
 563 Tr. : At
 564 Mary. : At Besease
 565 Tr. : My mother cook rice at Besease. She says her mother cook rice at Besease. Yes are you not going to try? ehin?
 567 Chd. : **Me kaikai**
 568 Chn. : [Laughter]
 569 Tr. : Yes
 570 Chd. : My mother is
 571 Chn. : [Laughter]
 572 Chd. : My, my
 573 Chn. : [Talking together]
 574 Tr. : Sells
 575 Chd. : My mother sells
 576 Tr. : My mother sells
 577 Chd. : My mother sells
 578 Tr. : Rice
 579 Chd. : Rice
 580 Tr. : Again my mother sells rice. She sells rice. She says the mother sells rice. eh. The food I like best is rice. The food I like best is rice. Yes Adu do you want to try?
 581 Adu. : Yes
 582 Tr. : Mhum, yes.
 583 Adu. : [(Inaudible)]
 584 Tr. : ehin?
 585 Chn. : The food is small.
 586 Tr. : The food is small. So you want to take big food? Mm. Yes nobody
 587 Chn. : [Talking together]

588 Tr. : Mhum!
 589 Chd. : My mother is cook rice.
 590 Tr. : My mother cooks rice. My mothers cook rice
 591 Chd. : My mother cook rice
 492 Tr. : Yes. Your mother cooks rice. Okay I have something
 of milk. I have tins of milk. Geisha is always found in tins. Geisha ,
 geisha is found in tins. Mackerel is found in tins
 593 Chn. : [Talking together]
 594 Tr. : I have some tins of what? Milk
 595 Chn. : [Talking together].
 596 Tr. : sit down I have some tins of what? Milk. We use milk
 to prepare beverage. Eh, what is beverage? Tea, ovaltine, coffee and so
 on. So we use Milo. We use milk to prepare Milo or we use milk to
 prepare tea, or my food. my food contains some milk. It contains some
 milk. Yes who wants to use milk for a sentence. Now yes you want to
 try. Come you want to try. That's well. That's what you have to do.
 Yes you have to try. Yes!
 597 Chd. : My mother, my mother is sell, sell milk
 598 Tr. : My mother sells milk in her shop
 599 Chd. : My mother
 600 Tr. : My mother sells
 601 Chn. : Sells. My mother sells
 602 Tr+Chn : Milk
 603 Tr. : In her shop
 604 Chd. : In her shop
 605 Tr. : My mother sells milk in her shop
 606 Chn. : [Talking together]
 607 Tr. : Packet, packet, packet.
 608 Chn. : [Talking together]
 609 Tr. : Packet. Yes?
 610 Ch. : My mother
 611 Tr. : My mother
 612 Chd. : My mother is in
 613 Tr. : Mhum! My mother is in, Mhum!
 614 Chd. : My mother is
 615 Tr. : My mother is ehε!
 616 Chd. : My mother
 617 Tr. : My mother is selling
 618 Chd. : Is selling
 619 Tr. : Packet of
 620 Chd. : Packet of
 621 Tr. : Matches
 622 Chn. : Matches
 623 Tr. : My mother is selling packets of matches. Yes she sells
 packets of matches Packets of candles, packets of matches, packets of
 candles. Okay, envelope, envelope. I wrote a letter and put it in an
 envelope

624	Chd.	:	My uncle
625	Tr.	:	My uncle sells envelope.
626	Chd.	:	My uncle sells envelope
627	Tr.	:	My uncle sells envelope. Yes
628	Chd.	:	My father sells envelope
629	Tr.	:	My father sells envelope
630	Chd.	:	My mother sells envelope
631	Tr.	:	My mother sells envelope Yes
632	Chn.	:	[Talking together]
633	Tr.	:	I put my letter in an envelope. εhe! My? εhein?
634	Chd.	:	My sister sells envelope
635	Tr.	:	My sister sells envelope. Yes, exercise book, exercise book
636	Chd.	:	My sister is exercise book.
637	Tr.	:	Dekyi sister has
638	Chd.	:	Exercise book
639	Tr.	:	Dekyi sister has
640	Chd.	:	Exercise
641	Tr.	:	Five exercise books
642	Chn.	:	Dekyi has five exercise books
643	Tr.	:	Good
644	Chd.	:	Adutwumwaa has six exercise books

APPENDIX 5 (12) TD: Mathematics

- LESSON : TWELVE
SCHOOL : MAKARANTA BORBOFO
CLASS : P3
TEACHER : "TD"
SUBJECT : MATHEMATICS
TOPIC : MULTIPLICATION-SOLVING FOR THE UNKNOWN
DATE : 29TH FEBRUARY, 1996
- 1 Tr. : We have multiplication. Multiplication all of you.
2 Chn. : Multiplication
3 Tr. : And we are going to solve some sentences.
4 Chn. : Solve sentences.
5 Tr. : Okay. Here, eh, multiplication can also be done at the same time with what? Division. Multiplication is a brother to division. And addition is a sister to minus. Okay, now let's say you are given Y times five is equal to twenty five. When you are given something like this, what you have to do is, you've got to solve for Y. You are going to have the answer for Y and here Y is equals to twenty five divided by five. When twenty five is divided by five what will be the answer?
- 6 Chn. : [Noise: pupils busy counting their counters].
7 Tr. : Yes who is ready?
8 Chn. : [Still counting]
9 Tr. : Yes who is ready? Who can tell me the answer? Mhum.
10 Chn. : Five
11 Tr. : Five , Five. Now let's see if she is correct. Five by five is equals to twenty five. A certain number if you multiply it by five you get twenty five What is the number? Now you see that Y will be twenty five divided by five and she is telling us the answer is that!
- 12 Chn.+Tr: Five
13 Tr. : Let's see if five is a factor of twenty five. Five times five what does that result?
14 Chn. : Twenty five
15 Tr. : Eh, let's see five times five?
16 Chn. : Twenty five
17 Tr. : Okay, five times five is twenty five. Now here the five is a factor of what? Twenty five and this five is also a factor of what? Twenty five. Here five can divide twenty five exactly without a remainder. And five too can divide this one exactly without a remainder. So here if you multiply five by five you get what?
- 18 Chn. : Twenty five
19 Tr. : So the five and five are factors of what?
20 Chn. : Twenty five
21 Tr. : Okay, let's try another one and see.
22 Chn. : [Noise: All talking together].
23 Tr. : Four times Y is equal to twenty four. What is the value of Y?

24 Chn. : [Noise: All talking together]
 25 Tr. : **Ti yee!** Four times Y equals twenty four. Therefore Y is equal to twenty four. I'm coming. twenty four, times, divided by four, eh, Lydia.
 26 Lydia. : Six.
 27 Tr. : What number is that?
 28 Lydia. : Six.
 29 Tr. : Six, clap for her.
 30 Chn. : [Clapping].
 31 Tr. : She says Y is what? Six. Let's see if she is correct. Let's have the factors of twenty four. If four times six will give us the number. Let's see four times six is what? Eh. Adu Grace four times six.
 32 Adu. : Twenty four.
 33 Tr. : Say it again
 34 Chn. : Twenty four.
 35 Tr. : Twenty four. Four times six is twenty four. Atta, now you are going to solve this question for us. If there is, listen. Where is your counters? What is the answer for Y?
 36 Atta. : [Shows counters]
 37 Tr. : Okay.
 38 Chn. : [Talking together]
 39 Tr. : Three times Y is eighteen. Three times Y is eighteen.
 40 Chn. : [Counting their counters]
 41 Tr. : What will be the answer for Y? Bernice. What is the answer for Y? ehe!
 42 Chn. : [Talking together].
 43 Tr. : Three times Y is eighteen What is the answer for Y?
 44 Chn. : Sir, sir, sir.
 45 Tr. : Lydia
 46 Lydia. : Six
 47 Tr. : Six
 48 Chn. : [Talking together]
 49 Tr. : Now you see that if you divide eighteen by three you get what? Six. And let's see, if we multiply three by six if we can get eighteen. Write three and then six. So the answer is what? Three times six?
 50 Lydia. : Eighteen
 51 Tr. : Eighteen. So she is correct. Let's work this one again.
 52 Chn. : [Talking together]
 53 Tr. : Twelve times Y is thirty six. Twelve times Y is thirty six. Twelve times Y is thirty six.
 54 Chn. : [Counting their counters]
 55 Tr. : Twelve times Y is thirty six. So what is the value of Y?
 56 Chn. : [Still counting their counters]
 57 Tr. : Yes count, count thirty six and then divide it by three
 58 Chn. : [counting]

- 59 Tr. : Emma what is the value of Y?
60 Emma. : Three
61 Tr. : Three, three, Y is three. Check it and see if she is correct. Thirty six. Check it and see. eh Ruth
62 Ruth. : [Counting her counters]
63 Chn. : [Laughing and talking together].
64 Tr. : Ruth what is the answer?
65 Ruth. : Three.
66 Tr. : Three. She is correct. Let's see so you have thirty six. Thirty six is right. Freda isn't it?
67 Freda. : Yes sir.
68 Tr. : And then you divide it by what?
69 Freda+Tr.: Twelve
70 Tr. : Which is a factor? So when you divide thirty six by twelve you get three. So here three is a factor of what? Thirty six. So three times twelve is what? Thirty six. The answer here, the thirty six is known as what?
71 Chn. : [Talking together].
72 Tr. : What name do you call thirty six? Thirty six is what? What's the name?
73 Chn. : [Talking together].
74 Tr. : Three is a factor, twelve is a factor. Thirty six is what?
75 Freda. : Product
76 Tr. : Product. Product all of you.
77 Chn. : Product
78 Tr. : Product
79 Chn. : Product
80 Tr. : So three is a factor, twelve is a factor and then thirty six is what? Product. So twelve can divide thirty six exactly without a remainder and then three can divide thirty six exactly without a remainder. Okay, now let's try another one and see. [Writes $6 \times y = 42$ on the bb.]
81 Chn. : [Counting their counters]
82 Tr. : Six times Y is forty two. Six times Y is thirty, eh, forty two. Six times Y is forty two. What is the value of Y?
83 Chn. : [Still counting their counters]
84 Tr. : Ben you are going to tell us the answer. Six times Y is forty two. You count forty two and then you divide it by what? by six. You count forty two and then you divide it by six and let's see the value of Y. Okyere are you not working? Ha!
85 Chd. : W^ose w^o mano enfa bi
86 Tr. : Yes Ben what's the answer?
87 Chn. : Six [whispering to Ben]
88 Ben : Five.
89 Tr. : No. It's not five. Eh Lydia.
90 Lydia. : [No response]
91 Tr. : Yes Adu

- 92 Adu. : Three [amid chn's. noise]
 93 Tr. : Hein!
 94 Chn. : Three!
 95 Tr. : No. It's not three. Six times Y is forty two. What is the value of Y? Yes Sarfowaa
 96 Sarfowaa.: Six
 97 Tr. : Hein!
 98 Sarfowaa: Six
 99 Tr. : Six, no. Adu Grace
 100 Adu. : Seven
 101 Tr. : Again
 102 Chn. : Seven
 1033 Tr. : Seven. Clap for her.
 104 Chn. : [Clapping]
 105 Tr. : Seven.
 106 Chn. : [Talking together: noise]
 107 Tr. : Y is seven. Let's see if she is correct. Six times seven? Six times seven is what?
 108 Chd. : Forty two.
 109 Tr. : Forty two. Clap for her.
 110 Chn. : [Clapping]
 111 Tr. : Adu [pointing to a child] this one is for you. Banaba what is the message?
 112 Banaba: **Me ka ye nanso wangye**
 113 Chn. : [Laughing and talking together]
 114 Tr. : Seven times Y is thirty five. Seven times Y is thirty five
 What is the value of Y? Count.
 115 Chn. : [Still counting their counters]
 116 Tr. : Seven times Y is thirty five
 117 Chn. : [Counting their counters]
 118 Tr. : Adu Twum we are waiting for you.
 119 Chn. : [Still counting their counters]
 120 Tr. : Yes Boadu. Do you want to tell us the answer?
 121 Boadu. : [Nods)]
 122 Tr. : Yaw Boadu what's the answer?
 123 Boadu : Seven.
 124 Chn. : [Talking together]
 125 Tr. : Is he correct?
 126 Chn+Tr. : No
 127 Tr. : You are not correct. Count well. Adu Twum yes!
 128 Chn. : [Talking together]
 129 Tr. : Yes
 130 Twum. : Five
 131 Tr. : Five! Clap for him.
 132 Chn. : [Clapping and talking together]
 133 Tr. : Nana what was your answer?
 134 Twum. : Five.

135 Tr. : Five
 136 Chn. : [Talking together]
 137 Tr. : So Y is.
 138 Twum. : Five.
 139 Chn. : [Talking together]
 140 Tr. : Y is five. Let's see. Seven times five? Seven times five?
 141 Burger. :
 141 Burger : Thirty five.
 142 Tr. : Thirty five. Seven times five is what? Thirty five. Okay.
 Seven times five is thirty five
 143 Chd. : Sir. ~~Hwe~~ me answer no ma me.
 144 Tr. : eh. Mhum. We are going to solve two others so that
 you stop work.
 145 Chn. : [Talking together]
 146 Tr. : Yes
 147 Chn. : [Talking together]
 148 Tr. : Eight times Y is forty. Eight times Y is forty.
 149 Chn. : Noise.
 150 Tr. : Aboagye DaCoster are you not working? Eight times Y
 is forty. Ntim tell us the answer.
 151 Chn. : [Counting their counters and talking together].
 152 Tr. : Y, eight times Y is forty. Eight times Y is forty. So
 what will be the value of Y?
 153 Chn. : [Still counting their counters and talking together].
 154 Tr. : Eight times Y is forty. What is the value of Y?
 155 Chn. : [Still counting their counters]
 156 Tr. : Eh Lydia, oh no. Amankwa want to tell us the answer.
 Tweneboa, Tweneboa yes.
 157 Tweneboa. : Six.
 158 Tr. : No, no. Yes
 159 Chn. : [Still counting their counters]
 160 Tr. : You have to count forty and then divide it by what?
 Eight.
 161 Chn. : [Still counting their counters]
 162 Tr. : No. Count forty. This is more than forty. Count forty
 [addressed to an individual child]
 163 Chd. : (Counts) 16, 17, 18, 19, 20, 21, 22, 23, 24,
 164 Tr. : Yes Bruce!
 165 Chn. : Five.
 166 Tr. : Five, eh, do you want to call me another answer?
 Another answer? What did you get?
 167 Chd. : Five.
 168 Tr. : Five, okay five. Alice did you get the same thing? What
 did you get?
 169 Alice. : Five
 170 Tr. : Five
 171 Chn. : [Talking together]

172 Tr. : The answer is what?
 173 Chn. : Five
 174 Tr. : Let's see if the answer is correct. Let's see.
 175 Chn. : [Talking together and laughter]
 176 Tr. : Eh, forty
 177 Chn. : [Talking together]
 178 Tr. : Keep quiet! I asked you to count forty. Then you divide
 it by what? Eight. The answer was what? Five. Let's see if she was
 correct. Eight times five? Eight times five is what? Gladys
 179 Chd. : Forty.
 180 Tr. : I have not called you. Gladys
 181 Gladys.: Forty.
 182 Tr. : Forty.
 183 Chn. : [Talking together and laughter]
 184 Chd. : Thirty.
 185 Tr. : It's not thirty. Forty. Say it.
 186 Chn. : *Sɛ wo wie a ka saa asem no*
 187 Tr. : And five is also a factor of what? Forty. So we have the
 product to be . Forty. Eight times five is forty. Okay, our last example.
 188 Chn. : [Talking together]
 189 Tr. : Yes
 190 Chn. : [Talking together].
 191 Tr. : Seven times Y is forty nine. Seven times Y is forty nine.
 Seven times Y is forty nine. What is the value of Y?
 192 Chn. : [Counting their counters] 1,2,3,4,..... 49.
 193 Tr. : I want Ntim Peter to tell us the answer. Ntim what is
 the answer?
 194 Chn. : [Still counting]
 195 Tr. : You have no counters. Hein! What's the answer?
 196 Ntim. : Seven
 197 Tr. : Seven Ntim says is seven Is he correct?
 198 Chn. : No sir.
 199 Tr. : Check it and let's see. Ntim says it is seven. What did
 you get?
 200 Chd. : Eight.
 201 Tr. : No. Check it and let's see.
 202 Chn. : Seven
 203 Tr. : Atta what's the answer?
 204 Chn. : Seven
 205 Tr. : Seven.
 206 Chn. : [Talking together].
 207 Tr. : The answer is seven
 208 Chn. : [Talking together].
 209 Tr. : Let's see seven times seven is what? Seven times what?
 210 Chn. : [Talking together]: five, seven, forty nine.
 211 Tr. : No. He!
 212 Chn. : Forty nine

- 213 Tr. : Forty nine. Seven times seven is forty nine.
- 214 Chn. : Talking together
- 215 Tr. : Okay, okay. We are left with number five.
- 216 Chn. : [Counting their counters and talking together]
- 217 Tr. : Nine times Y is twenty seven. Salomey tell us the answer. Nine times Y is twenty seven. What is the value of Y?
- 218 Chn. : [Counting their counters and talking together]
- 219 Tr. : John Dua. **Wo nte?** Count twenty seven
- 220 Chn. : [Counting their counters]
- 221 Tr. : Twenty seven, twenty seven.
- 222 Chn. : [Counting their counters]
- 223 Tr. : Salomey you are going to tell us the answer. Twenty seven. Y times nine is twenty seven
- 224 Chn. : [Counting their counters]
- 225 Tr. : Y times nine is twenty seven.
- 226 Chn. : [Counting their counters]
- 227 Tr. : Eh, Portia
- 228 Portia. : Three.
- 229 Tr. : Three, three all of you.
- 230 Chn. : Three
- 231 Tr. : Three
- 232 Chn. : Three
- 233 Tr. : Okay, clap for Portia.
- 234 Chn. : [Clapping]
- 235 Tr. : Let' see Nine times three is what?
- 236 Chn. : Sir, sir
- 237 Tr. : Nyantakyiwaa. Nine times three.
- 238 N'akyi. : Twenty seven
- 239 Tr. : Twenty seven. Twenty seven. Yes Twenty seven. Nine is what? Nine is what? Eh ShaCross. Nine is what?
- 240 S'Cross : Factor
- 241 Tr. : Factor. Eh, Adu, Adu Benaba. Three is what?
- 242 B'Adu. : Factor
- 243 Tr. : Say it again
- 244 Chn. : Factor.
- 245 Tr. : Factor and then twenty seven. Gyamfua.
- 2466 Gyamfua: Product
- 247 Tr. : Product all of you.
- 248 Chn. : Product.
- 249 Tr. : Product. Okay. So here I am going to clean some of the answers
- 250 Chd. : **Me twere answers no nyinaa.**
- 251 Tr. : Then you are going to fill them yourself
- 252 Chn. : **ebi etwere answers no o!** [amid Chn talking together]
- 253 Tr. : I am going to change some. Don't worry.
- 254 Chd. : **Twere ne nyinaa wonte**
- 255 Chd. : **Medee firi meso kɔ.**

- 256 Tr. : [Changes some answers and rubs off some figures]
 257 Chn. : [Talking together and copying worked examples]
 258 Tr. : Now you have number one to be four times Y is forty.
 So what is the value of Y? Then number two, seven times Y is forty
 two. What will be the value of Y? And then number three, six times Y
 is eighteen. What will be the value of Y? Number four. Nine times Y is
 forty five. What is the value of Y? And then three times Y is twenty
 seven. What's, what's the value of Y? Then number six. Seven times Y
 is thirty five. What is the value of Y? Open your books and then work.
 Open your books and work numbers one to six. Number one to six.
- 259 Chn. : [Talking together]
 260 Tr. : Three times Y is twenty seven . Number five. Then,
 then number two. Seven times Y is forty two. Then number three, six
 times Y is eighteen. Number six, seven times Y is thirty five. I don't
 want any dirty work. Your work should be very neat and you should
 not be erasing it
- 261 Chn. : [Some working and others talking]
 262 Tr. : I worked about seven examples for you so you should
 be able to get everything.
- 263 Chn. : [Working]
 264 Tr. : Multiplication. You are solving all these sentences
 265 Chn. : [Some working and others talking]
 266 Tr. : Like I told you, multiplication and division they work
 together and you have the product and still you have the factor. You
 should be able to bring the factor. You should be able to bring the
 factor. So like number one, you have four to be a factor and then you,
 the factor for the other factor for the forty. Four times Y is forty. So
 forty divided by four will give you the value of Y. So you find the
 factors for forty. Four times certain number will give you forty. What is
 the number? You put that number, it is the factor. Then seven times Y
 is forty two. What will be the value of seven? Oh Y, Y! Seven becomes
 a factor and then you find a factor for, the other factor for forty two. If
 seven is a factor. Then number three. Six times Y is eighteen. What is
 the value of Y? So six is a factor and then the other number that you
 will get will be a factor of eighteen
- 267 Chn. : [Some working and others talking]
 268 Tr. : Martha Yes,
 269 Chn. : [Some working and others talking]
 270 Tr. : Finish with number one before you go to number two.
 Don't copy down just like that. You finish with number one. Then you
 get all the answers. Then go to number two.
- 271 Chn. : [Some working and others talking].
 272 Tr. : Mhum, Adu Okyere number one is correct, number
 two, correct. Number two is correct.
- 273 Chn. : [Talking together]
 274 Tr. : Mhum, Atta let me see. Mhum, one is correct, number
 two correct. Finish the number three before you come to the number

- four. Finish with that You count eighteen then you divide it by six. Count eighteen. Ntim yes. What have you done?
- 275 Chn. : [Some working and others talking].
- 276 Tr. : Mhum, then put this one here. This one, this one put it here. Put it here. This answer put it here.
- 277 Chn. : [Some working and others talking]
- 278 Tr. : Mhum, then number two, you are wrong. It's not nine. Count it well. It is not seven.
- 279 Chn. : [Working and talking together].
- 280 Tr. : Finish with number one before you do number two. Don't just copy it down. What's the value of Y for number one? Don't just jump to number two. Finish with it. The same thing that Atta is doing. All of you are copying it. Finish with number one, Get the answer before you go to number two. Where is the equal to? Where is the equal sign? He! You have written ten. Four times ten. Where is the equal to? This sign, this sign where is it? Place it here. ehε!
- 281 Chn. : [Working and talking together]
- 282 Tr. : Don't be using the eraser to make the work dirty. If you make it dirty I will beat you
- 283 Chn. : [Working and talking together]
- 284 Tr. : ehε, Sarfowaa is there any problem? ehε, number one is correct. Number two,
- 285 Chn. : [Talking and working]
- 286 Tr. : Number two is also correct
- 287 Chn. : [Talking and working].
- 288 Tr. : Yes
- 289 Chd. : **Wose ma yɛn hyehyε ngɔyae hɔ, naa yɛn hyehyε answer no ansa na yɛn kɔ so?**
- 290 Tr. : Sekyere where is your number two before you come to number three
- 291 Chn. : [Talking and working]
- 192 Tr. : Yes Yeboah, number one you are wrong. You are wrong. It say four times Y is forty. Y will give you! What's the value of Y? Forty divided by what? by four. You count forty. You divide it by four. So Y is not six. Four times four will not give you forty. Four times four will give you what? What will be the answer for four times four? Four times four is what? Yes who can tell us the answer?
- 293 Chd. : Sixteen
- 294 Tr. : Sixteen. Four time four. Yemeh.
- 295 Yemeh : Sixteen
- 296 Tr. : Sixteen. Not eh, four times four is not forty. You are wrong. Clean it, clean this and then this one

APPENDIX 5 (13) TD: Ghanaian language

LESSON : THIRTEEN

SCHOOL : MAKARANTA BORÐFO

CLASS : P3

TEACHER : "TD"

SUBJECT : GHANAIAN LANGUAGE

TOPIC : ME SUKUU

DATE : 29TH FEBRUARY, 1996

- 1 Tr. : Yebe twere. Na adee a yebe twere no, ye wɔ adee bi a yefre no **composition. composition, composition.** Yebe ka ye sukuu ye ho asem. 'Me Sukuu'. Mo nyinaa.
- 2 Chn. : Me Sukuu
- 3 Tr. : Mama anka Borɔfo mua anka ye be ka no sen?
- 4 Mama. : **School**
- 5 Tr. : Borɔfo mua anka ye be ka sen?
- 6 Chd. : **My**
- 7 Tr. : **My. Mhum!**
- 8 Chd. : **My school.**
- 9 Tr. : **Clap for him.**
- 10 Chn. : [Nsam mmɔ]
- 11 Tr. : Borɔfo mua anka ye be ka no sen?
- 12 Chn+Tr.: **My school.**
- 13 Tr. : Se wahu? Me sukuu. Mo nyinaa.
- 14 Chn. : Me Sukuu
- 15 Tr. : Okay yebe ka ye sukuu yi ho asem. Se obia ba ha
- 16 Chn. : **Yes sir**
- 17 Tr. : enna obia nso nim ye sukuu yi ho asem, sedee esi tee, me boa?
- 18 Chn. : **Yes sir.**
- 19 Tr. : **Okay** se saa na etee dee a ennee na yebe dikan asua ye sukuu yi enneema yehunu no wo mu. Se eye fe, se enye fe. Sedee esi tee. Yebe ka ho asem ama obi se wɔwɔ Kumasi na wɔ mba sukuu mo ha sei a wɔbe hunu se, ye sukuu sei na etee. ee seme bisa wo **question** a, enne se wo yi ano. gye se me bisa wo ansa na wo ayi ano. Me sukuu. Wo sukuu, ee, Atta wo sukuu din de sen?
- 20 Atta. : **Mkaranta Primary School.**
- 21 Tr. : Wa twa? Wɔse **Mkaranta Primary School.** Watwa?
- 22 Chn. : No sir.
- 23 Tr. : Wɔn twa ye. Burger wo sukuu din de sen?
- 24 Chn. : Mkaranta Boroɔfo
- 25 Tr. : Wo no nso wɔn nya ntwa ye. Wɔ ye atwa nso wa gye biribi mu. ee Lydia
- 26 Lydia. : Mkaranta Boroɔfo R/C Primary School
- 27 Tr. : Good. Mkaranta Boroɔfo R/C Primary School
- 28 Chn+Tr: R/C Primary

- 29 Tr. : Wo sane de sukuu no be twa so a, na aye mmein. Me sukuu din de: Mkaranta Borofo R/C Primary School. Se wahunu se wahunu sedee ye twere no?
- 30 Chn. : Yes sir
- 31 Tr. : Se seesei obia ate ne sukuu no din. Me sukuu din de Mkaranta Borofo R/C Primary School. Me sukuu din de (writes on the bb) Mkaranta Borofo R/C Primary School no ase kyere sen? Fa wo nan si fam. R/C no ase kyere sen? R/C
- 32 Chn. : R/C
- 33 Tr. : Nea ehye mu h no Dee wei no kyere R/C, R/C primary. Mo ahunu se mo nkrataa akyiri no mo atweretwere Mkaranta Borofo R/C Primary School R/C no ase ne sen? ehein? Hwan na ebetumi aka R/C no akyere yen? Aha? Obia entumi nka nkyere yen? Eei! Na ekyere se mo twere gu mo nkrataa no akyire no mo enim ade koro?
- 34 Chd. : enye me na me twere.
- 35 Tr. : Aha! eye a na ma twere agu akyire. R/C no ase ne sen? Roman Catholic.
- 36 Chn+Tr: Roman Catholic:
- 37 Tr. : Se wahunu. enye Romanfo sukuu a?
- 38 Chn. : Yes sir
- 39 Tr. : Roman Catholic. Catholicfo. Roman Catholic Primary
- 40 Chn. : Yei!
- 41 Tr. : Se wahunu? RC, RC, R kyere sen? Roman and C no kyere sen?
- 42 Chn+Tr.: Catholic
- 43 Tr. : Nti ye sukuu no din nono. Nti Romanfo na ehwe ye sukuu yi so. eye aban dee nso Romanfo na ehwesoo, na wom de akoma aban. Okay yahunu se ye sukuu no de
- 44 Chn+Tr.: R/C Primary School
- 45 Tr. : De ewo Mkaranta Borofo R/C Primary School. Kuro ben na sukuu no woso?
- 46 Chd. : [Kasa]
- 47 Tr. : [Writes on the bb]. efa he ne na yebe hunu wo sukuu no? Mo sukuu no efa he ne na yebe hunu no? Sekyere.
- 48 Sekyere.: Mkaranta
- 49 Tr. : Mkaranta, Mkaranta. Yebe hunu , wo behunu me sukuu no wo Mkaranta, Mkaranta.
- 50 Chn. : Mkaranta
- 51 Tr. : efa he ne fa? Se ye wo Mkaranta no mmein. ebi wo Konongo. Na ye yedee yi wo h he? Okyere.
- 52 Okyere : Mangoase Mkaranta
- 53 Tr. : Watwa nanso yen hye Mangoase ase. Ye hye fa he?
- 54 Chd. : Konongo
- 55 Chd. : Biposo.

- 56 Tr. : No. enye Bipso, enye Bipso Mkaranta, ye hye kuro bi ase.
- 57 Chd. : Aha.
- 58 Tr. : Anha
- 59 Chd. : Kononu.
- 60 Tr. : enye de Kononu, Kononu e ye ye eyi sen? ehein, Yes!
- 61 Chn. : [Laughing]
- 62 Tr. : Kuro ben na eye a na ye kso? Yaa ye hye wom ase
- 63 Chd. : Kumasi
- 64 Tr. : enye Kumasi
- 65 Chn. : Nkran.
- 66 Chd. : Eei!
- 67 Chn. : Konongo Makaranta.
- 68 Tr. : Dabi Konongo Makaranta nko. Ye yende yi yehye kuro bi ase. Ya na yek hnom ek ye eh na
- 69 Chn. : **Sir, sir, sir, sir** [Kasa]
- 70 Tr. : Mea wo ano, mea wo ano. Me nfre wo.
- 71 Chd. : Mampong
- 72 Chn. : Yei!
- 73 Tr. : **Yes**
- 74 Chd. : Mampong
- 75 Tr. : Mampong
- 76 Chn. : Mampong
- 77 Tr. : **Yes, moha adwene**
- 78 Chn. : Mampong Makaranta. **Sir** wom de no k he?
- 79 Tr. : Mampong
- 80 Chd. : [Kasa]
- 81 Tr. : Nti obi bisa wo se Makaranta a eben he? Mampong
- 82 Chn. : [Kasa]
- 83 Tr. : **Keep quiet, keep quiet.**
- 84 Chn. : **Sir, sir**
- 85 Tr. : Mampong. Mpabua no fa wo nan hye. Mampong. Mpabua no fa wo nan hye mu. eye shoe? Nti seesei yahunu se
- 86 Chn. : [Kasa]
- 87 Chd. : He!
- 88 Tr. : Me sukuu din de Mkaranta Borofo R/C Primary School. Na wobe hunu me sukuu no w
- 89 Chn+ Tr.: Mkaranta Mampong.
- 90 Tr. : **Okay**
- 91 Chn. : [Kasa]
- 92 Tr. : Me sukuu
- 93 Chn. : Deeben na mo kyere yi?
- 94 Tr. : Me sukuu panin din de sen? Wo sukuu panin, wo sukuu panin, ne din de sen?
- 95 Chn. : **Sir, sir**
- 96 Tr. : **Yes Victor Annor**

- 97 Annor. : Mr Boamah
 98 Tr. : **Mr Boamah. Clap for him.**
 99 Chn. : (Nsam mm▷)
 100 Tr. : Me sukuu pa [turns and writes on the bb]. Me sukuu panin din de
 101 Chn. : Mr Boamah.
 102 Tr. : Me sukuu panin din de Me sukuu panin din de
 103 Chn. : Mr Boamah.
 104 Tr. : Me sukuu panin din de
 105 Chn+Tr. : Mr Boamah
 106 Tr. : εε, se yeβa wo sukuu a, adan sen na εw▷ h▷?
 107 Chn. : **Four, five , ten, six.**
 108 Chd. : enye mo na ye ka kyerε mo se mo mua mo ano no?
 109 Tr. : Atta Kwasi .No.1. Wo sukuu adan sen na εw▷ h▷?
 110 Atta 1. : **Nine**
 111 Chn. : Yiee!
 112 Atta 1. : **Six.**
 113 Tr. : Na yeεε. Yen ye Boro▷fo o! Nti εw▷ se wo ka no Twi
 114 Atta 1. : Nkron.
 115 Tr. : Wose nkron. **Okay** yeβε kan ahwe se eye nkron a. Nti eye sen ? Nsiah.
 116 Tr. : Yeβε kan ahwe se eye nsia
 117 Chn. : **Sir, sir, sir**
 118 Tr. : Adan sen na εw▷ h▷? **Yes.**
 119 Chd. : enson.
 120 Tr. : **Okay** mo nya abotare na yen kan. **One**, baako, mmienue mmeensa, enan, enum, nsia, enson, nw▷twe, nkron, edu, dubaako
 121 Chn. : Dubaako
 122 Tr. : Adan εw▷ h▷ eye dubaako, dubaako. enti wo sukuu adan sen na εw▷ h▷?
 123 Chn. : εdubaako
 124 Tr. : Dubaako. Me sukuu adan ye
 125 Chn+Tr.: Dubaako
 126 Tr. : Me sukuu adan ye
 127 Chn+Tr.: Dubaako
 128 Tr. : εε wo dan a wote mu no, ya ye mu kama ana? Wo dan a wote mu.
 129 Chn. : **Sir, sir**
 130 Tr. : εε Sarfoa
 131 Sarfoa. : Ya ye mu kama nanso ye anyε awie.
 132 Chn. : [Laughing]
 133 Tr. : ennee na εmu enye kama.
 134 Chn. : [Laughing]
 135 Tr. : Salomey.
 136 Salomey: Ya ye mu kama. Ya **cementi** mu.
 137 Tr. : Ya **cementi** mu? εε

- 138 Chn. : **Sir, sir**
- 139 Tr. : **Prince.**
- 140 Prince. : enye kama.
- 141 Chn. : **Sir, sir**
- 142 Tr. : Yaw Boadu wo wɔ asem fofro ka ma yente. Wo sukuu dan no emu ye kama?
- 143 Yaw. : **No, sir.**
- 144 Tr. : ehe, wose eyɛ?
- 145 Yaw : **No, sir.**
- 146 Tr. : ee na saa na etee deɛ a, ye sukuu dan no mu no emu enye kama.
- 147 Chn. : Abusia, mm abusiabusia
- 148 Tr. : ehe, abusiabusia. enno na adwiri a anka efa eyɛ atɔ famɔ ye.
- 149 Chn. : [Kasa]
- 150 Tr. : Dan no mu enye
- 151 Chn. : enye. [Kasa]
- 152 Chd. : Aden na mope kasa sei!
- 153 Tr. : Wo sukuu mo no wo gyina gyina pen sen?
- 154 Chn. : [Kasa]
- 155 Tr. : Portia wogyina gyinapɛn sen?
- 156 Portia. : **Class three**
- 157 Tr. : Kase me gyina gyinapɛn. Yes Mhum!
- 158 Portia. : Me
- 159 Chn. : Me, me sir
- 160 Tr. : **Yes** [pointing to a chd.]
- 161 Chd. : Me gyina gyinapɛn mmeɛnsa.
- 162 Chn. : [Kasa]
- 163 Tr. : Me gyina gyinapɛn mmeɛnsa.
- 164 Chn. : Na wo antumi anka, aa!
- 165 Tr. : Me gyina gyinapɛn mmeɛnsa. (turns and writes on the bb)
- 166 Chn. : [Kasa]
- 167 Tr. : Me gyina gyinapɛn mmeɛnsa. (While writing on the bb)
- 168 Chn. : [Kasa]
- 169 Tr. : Me gyina gyinapɛn mmeɛnsa.
- 170 Chn. : [Kasa]
- 171 Chd. : Hwe mo mua mo ano?
- 172 Tr. : Se yeto ye ani. Se woto wani hwe wo sukuu mu a edeben na ewɔ hɔ? edeben na ewɔ hɔ? Edusei.
- 173 Edusei. : Bankye
- 174 Chn. : Eei!
- 175 Tr. : Bankye ebi ewɔ fa he?
- 176 Edusei. : Garden mu ha
- 177 Tr. : ebi wɔ garden mu. Okay eden bio enna ewɔ ha?
- 178 Chd. : **Trees.**

179	Tr.	:	Nnua, nnua
180	Chn.	:	Nnua
181	Tr.	:	Nnua
182	Chn.	:	Sir, sir , mboba.
183	Chn.	:	Mo mua mo ano.
184	Tr.	:	Mhum, edeben bio na ew⊃ ha? ehein Emma.
185	Emma.	:	Bor⊃deε
186	Tr.	:	Bor⊃deε. ehein!
187	Chd.	:	Flowers
188	Tr.	:	Flowers , ehein!
189	Chd.	:	Abε
190	Tr.	:	Abε ehein!
191	Chd.	:	Mango.
192	Tr.	:	Mango. Fine
193	Chn.	:	Sir, sir teacher pineapple. Sir
194	Tr.	:	Yes. [pointing to a chd.]
195	Chd.	:	Mmboba.
196	Tr.	:	Mmboba okay
197	Chd.	:	Sir
198	Tr.	:	Aka enno⊃ma mmienu bi.
199	Chn.	:	Sir, sir banana
200	Tr.	:	Eh, yes
201	Chn.	:	εban.
202	Tr.	:	Ya gye εban?
203	Chn.	:	Ane/Yes sir
204	Tr.	:	ehein
205	Chn.	:	Aboro⊃fo nkateε
206	Tr.	:	Aboro⊃fo nkateε
207	Chd.	:	Banana.
208	Chn.	:	Sir, sir
209	Chd.	:	Bor⊃deε
210	Tr.	:	Bor⊃deε obi aka
211	Chn.	:	Sir, sir, sir, sir aka baako [Kasa]
212	Tr.	:	enti ye w⊃ nnuaba beberee enna ye w⊃ nnua ya dua.
	Nnuaba		
213	Chn.	:	Nnuaba
214	Tr.	:	Beberee w⊃ me sukuu [turns round and writes on the bb]
215	Chn.	:	[Kasa]
216	Tr.	:	Adeε bi w⊃ha ye nya mm⊃ din
217	Chn.	:	Sir, sir , ma me nka.
218	Tr.	:	Bεbia εba sε wo yεm ye wo ya a wotu mirika sε wope h⊃nom
219	Chd.	:	Sir toilet
220	Tr.	:	Toy yet!
221	Chd.	:	Me na me ka ye. Ma me nka?

- 222 Tr. : εε wo!
- 223 Chd. : **Toilet.**
- 224 Tr. : **Toilet**
- 225 Chn. : [Kasa]
- 226 Tr. : Naa, enna ye sane wɔ
- 227 Chd. : **Banana**
- 228 Tr. : Obi aka.
- 229 Chn. : Dwonsɔdwareε
- 230 Tr. : Dwonsɔdwareε. **Fine!**
- 231 Chn. : Tikya dee wo εma bi ekabi
- 232 Tr. : Nti ye wɔ dwonsɔdwareε enna ye sane wɔ **toilet.**
- 233 Chn. : enna ye sane wɔ
- 234 Tr. : enna ye sane wɔ den?
- 235 Chn. : Atowa
- 236 Tr. : Sε atowa no ye duaba
- 237 Chn. : sirie
- 238 Tr. : Sε wahunu. Ya twere ha sei sε: Ye wɔ nnuaba beberee wɔ me sukuu. Nti nuuaba no atowa kaho. Atowa kaho. εε mango kaho, ankaa kaho, kwadu kaho. Saa ayi nyinaa yedeεn? eye nnuaba. Sε wahunu? enna Aborɔfo nkateε. Ne nyinaa ye nnaba yedie. **Okay?**
- 239 Chn. : [Kasa]
- 240 Tr. : Nti sε yehwe a yewɔ toilet. Sεbi bebia ye gya ye nan, agyanan. Yεfre no agyanan. Mmonka ma me ntie.
- 241 Chn. : Agyanan
- 242 Tr. : enna yewɔ bebia ye dwonsɔ, dwonsɔdwareε. Sε wahunu?
- 243 Chn. : **Yes sir.**
- 244 Tr. : Nti saa nneεma yi mmienu enna eye adeε paa ehia wɔ sukuu ha. εfiri sε mo sore a mo yeden?
- 245 Chn. : Yeke dwonsɔ
- 246 Tr. : Mmonkɔ gya Mmonan? Sε wahunu, ye kɔ gyayenan. enna ye sore nso a, ye kɔ dwonsɔ. Wahu? Nti ye wɔ
- 247 Chn. : [Kasa]
- 248 Tr. : Nti yewɔ agyanan [says while writing on the bb]
- 249 Chn. : Agyanan
- 250 Tr. : Ne dwonsɔdwareε.
- 251 Chn. : [Kasa]
- 252 Tr. : Fa **chalk** no bi bra
- 253 Tr. : Fa **chalk** no bi bra na **chalk** no asa.
- 254 Chn. : [Kasa]
- 255 Chn. : enti yebɔ akyire, yebɔ akyire kakra ahwe. Ye kan dee ya twere ye akyire kakra na ya hwe: Me sukuu din de Mkaranta
- 256 Tr+Chn Boroɔfo R/C Primary.
- 257 Tr. : Wobe hunu me sukuu no wɔ Mkaranta Mampong
- 258 Chn. : Wobe hunu me sukuu no wɔ Mkaranta Mampong

- 259 Tr. : Me sukuu panin din de
- 260 Chn+Tr.: Mr Boamah. Me sukuu adan ye dubaako.
- 261 Tr. : Me sukuu dan enye kama. Me gyina gyinapen
- 262 Tr+Chn.: Mmeensa
- 263 Tr. : Nnuaba beberee wɔ me sukuu. Yewɔ agyanan ne dwonsɔdwaree wɔ me sukuu. Seesei asem kese ben na aka a esese ye ma obi hunu no se ebi wɔ ye sukuu mu. Naa ensoso obi nya nte ye? edeben nea? Adeebi wɔ ha ewɔha mo nya nka ye? ee aka den?
- 264 Chd. : **Park.**
- 265 Tr. : **Park.** Mmo nclapu [clap] ma no
- 266 Chn. : [nsam mm].
- 267 Tr. : Se wo ahunu **park.** Bebia yedi agorɔ. Se wo ahunu bebia yedi agorɔ. Mo mmɔ din. aha!
- 268 Chn. : [Kasa]
- 269 Chd. : ehe mo mua mo ano.
- 270 Tr. : Yewɔ agodibia. Mo nka ma me nte.
- 271 Chn. : Agodibia.
- 272 Tr. : Agodibia
- 273 Chn. : Agodibia Agodibia, Agodibia Agodibia [repeating without being told to do so. Followed immediately by talking together]
- 274 Tr. : [Writes on the bb]
- 275 Chn. : Agodibia, agodibia [read word teacher wrote on the bb]
- 276 Tr. : Yewɔ agodibia wɔ me sukuu
- 277 Chn. : Yewɔ
- 278 Tr. : Se wahu
- 279 Chd. : **Yes.**
- 280 Tr. : enna asane aka adee baako
- 281 Chn. : [Kasa] Aka bebia yetɔ aduane ediee!
- 282 Tr. : Se bebia yedi agorɔ no ya hunu. Ya hunu bebia yekɔ gyayenan. enna ye a sane ahunu bebia yekɔ dwonsɔ. enna yahunu gyinapen a ye gyina. Ye asane ahunu ye dan, ye dan mu. Ye a hunu. Seesei aka ayi.
- 283 Chn. : **Sir, sir** [Then whispering to each other :bebia yekɔ kɔ didi]
- 284 Tr. : Mhum?
- 285 Chn. : [Kasa]
- 286 Tr. : ee mpese wo kasa kyere yen. Kuffour edeben bio enna ye sane wɔ
- 287 Chn. : edwom.
- 288 Tr. : He!
- 289 Chn. : edwom.
- 290 Tr. : edwom. Bebia yetɔ ye aduane. **Canteen**
- 291 Chn. : **Canteen**
- 292 Tr. : Se yewɔ **canteen**
- 293 Chn. : [Kasa]
- 294 Tr. : (Writes on the bb)

- 295 Chn. : Yew▷ canteen ana se bebia yet▷ aduane diee.
 296 Tr. : Mo nka ma me nte.
 297 Chn. : Yew▷ canteen ana se bebia yet▷ aduane diee.
 298 Tr. : **Okay**, saa na ete ye deε a, mo ma yen sane nfa akyire na yen hwe. Na yen sane nkaekae nneεma ya sua. Me! [points to the first sentence on the bb].
- 299 Chn. : Me sukuu din de Mkaranta Boro▷fo R/C Primary
 300 Tr. : Wo. [points to the second sentence on the bb]
 301 Chn. : Wobe hunu me sukuu no wo Makaranta Mampong.
 302 Tr. : Kan ne.
 303 Chn. : Me sukuu no pa
 304 Tr. : Panin
 305 Chn. : Di
 306 Tr. : De
 307 Chn. : De Mr Boamah. Me sukuu a
 308 Tr. : Adan
 309 Chn. : Adan ye dubaako
 310 Tr. : Me sukuu adan ye dubaako
 311 Chn. : Me sukuu adan ye dubaako. Me sukuu dan mu ε
 312 Tr. : enye
 313 Chn. : enye kama
 314 Tr. : Me gyina
 315 Chn. : Me gyina
 316 Tr. : Gynapen
 317 Chn. : Gynapen mmeensa
 318 Tr. : Me gyina gynapen mmeensa.
 319 Chn. : Me gyina gynapen mmeensa.
 320 Tr. : Nnuaba bebereε w▷ me sukuu.
 321 Chn. : Nnuaba bebereε w▷ me sukuu.
 322 Tr. : Yew▷
 323 Chn. : yew▷ dwons▷
 324 Tr. : Agyanan.
 325 Chn. : Agyanan ne dwons▷dwareε w▷ me sukuu. Ye
 326 Tr. : Ye
 327 Chn. : Yew▷
 328 Tr. : Agor▷dibia
 329 Chn. : Agor▷dibia w▷ me sukuu. Ye w▷ canteen
 330 Tr. : **Canteen**
 331 Chn. : Ana se bebia ye
 332 Tr. : t▷
 333 Chn. : t▷ aduane diee
 334 Tr. : Yew▷ canteen ana se bebia ye t▷ aduane diee
 335 Chn. : Yew▷ canteen ana se bebia ye t▷ aduane diee
 336 Tr. : Asa . Seesei aka nipa yew▷ no w▷ sukuu ha.
 337 Chn. : Eei! Weideε!

- 338 Tr. : Wode wani fa mu a enipa dodow sen na ye w ha?
- 339 Chd. : Yeei deε ye do so o!
- 340 Chd. : Tikya ye dan mu ha?
- 341 Chn. : **Hundred, seventy, seventy.**[Talking together]
- 342 Tr. : Yebo hundred.
- 343 Chn. : **One fifty two hundred.**
- 344 Tr. : Yebo two hundred.
- 345 Chn. : **Thousand.**
- 346 Tr. : Yen duru thousand. Yen duru ayi koraa **three hundred.** Yebe ye **two thirty.**
- 347 Chd. : Middle ka ho?
- 348 Tr. : Nhum.
- 349 Chn. : Yei, eei. enipa do so.
- 350 Tr. : Me nua no mo a yew sukuu ha beye ahasa. Me nua no mo a yew sukuu ha beye ahasa
- 351 Chn. : Me nua no mo a yew sukuu ha beye ahasa.
- 352 Tr+Chn.: Me nua no mo a yew sukuu ha beye ahasa.
- 353 Tr. : **Three hundred.**
- 354 Chd. : Tikya ye nduru o!
- 355 Tr. : Yebe duru
- 356 Chn. : [Kasa]
- 357 Tr. : Yebe ye **three hundred.** Nti wo hunu se seesei no, seesei ya hunu se obi enim ye sukuu ha, na ek ba se krataa yi. Ya twere krataa yi se me sukuu na yede atoh nom a, obia onim ha no, w w Nkran koraa, betumi afa na wa kan na wa tumi aba ha. Wo nya fa kai na woduru Mampong na wo kase me pe Makaranta a, wo be ba ha. Na w ba nso a, enneema wo aka afa wo sukuu no ho no, se wo **school** panin de Mr Boamah
- 358 Chd. : Abaa na eda h no.
- 359 Tr. : Se obiso ba ebe hunu se saasukuu no sei na etee: ye w adan nea eye enan ya eyeden? Mpata. Mo nim mpata?
- 360 Chn. : **Yes sir**
- 361 Tr. : Wei ne apata. Wei ye mpata; **shelter.** Se wahunu? enhye da enye dan. Se wa hunu? Ya ka ne nyinaa na akaho enna eye sen?. Nti se ye te enan no firi dubaako no mu a, adan papa a ye w no eye sen? Nson. Se wa hunu? Ye w adan papa nson. **Okay** seesei yahunu se ye dan no mu enye den? enye kama. ew se nka ye **cementi** mu, me boa?
- 362 Chn. : **Yes sir.**
- 363 Tr. : Abosia na ew mu.
- 364 Chd. : Sei na eye
- 365 Tr. : Wose sen?
- 366 Chd. : Sei na eye.
- 367 Tr. : Naa anka aye wei bi a!
- 368 Chn. : Mm

- 369 Tr. : Nso yen ne bi. Se obi ba na wɔba Mampong, na ye kyere no Makaranta a, ɔsi ye a, ɔbehunu se aha na eye sukuu. ee asem bisa ben na ewɔhɔ? Obi betumi abisa asem bi. Anaa me, me bisa mo?
- 370 Chn. : **Yes sir.**
- 371 Tr. : ee Tweneboa. Wo sukuu din de sen? Wo sukuu din de sen? ee Martha.
- 372 Martha: Me sukuu din de Mkaranta Boroɔfo R/C Primary School
- 373 Tr. : Mo . Me sukuu din de Mkaranta Boroɔfo R/C Primary School. Ye a, ma mo nfa sukuu no entoa so bio. Wo de toaso a na akɔ ye mmien. ee Wo be hunu wo sukuu no wo fa he? ee Ntim Wo sukuu no wobɛ hunu no wɔ fa he?
- 374 Ntim. : Makaranta Mampong.
- 375 Tr. : Makaranta Mampong. ee Kobina, Wo sukuu panin din de sen?
- 376 Chn. : Awurade
- 377 Kobina : Me sukuu panin din de
- 378 Tr. : Din de?
- 379 Kobina : din de Mr Boamah.
- 380 Tr. : Me sukuu panin din de Mr Boamah. A dan sen na ewɔ wo sukuu? Sekyere. Adan sen?
- 381 Sekyere : Dubaako
- 382 Tr. : Dubaako, ee Hanna. Wo sukuu dan mu te sen?
- 383 Chn. : emu wɔ tan
- 384 Tr. : emu wɔ tan. Wo sukuu dan mu wɔ tan. Wo sukuu dan mu wɔ tan. ee Adu Grace wo gyina gyinapɛn sen?
- 385 Grace. : Me gyina gyinapɛn mmeensa.
- 386 Tr. : Me gyina gyinapɛn mmeensa. Mo wɔ ayi, adee. edeeben enna wo be hunu wɔ wo sukuu mo? Ruth.
- 387 Ruth. : ennua
- 388 Tr. : ennua no eyeden? ennua no eyeden?
- 389 Chn. : ennuaba
- 390 Tr. : ennuaba. eye baako?
- 391 Ruth. : **No sir, no sir.**
- 392 Tr. : eye sen?
- 393 Ruth. : eye beberee.
- 394 Tr. : eye beberee. Na Lydia mo wɔ agyanan wɔ mo sukuu?
- 395 Chn. : **Yes sir, yes sir.**
- 396 Tr. : Ane
- 397 Chn. : Ane ye wɔ agyanan wɔ ye sukuu
- 398 Tr. : Ane ye wɔ agyanan wɔ ye sukuu. Ane ye wɔ agyanan wɔ ye sukuu.
- 399 Chn. : [Kasa]

- 400 Tr. : εε agorɔdibia wɔ, ye wɔ agorɔdibia. eden agorɔ na
modi no ewɔ hɔ?. eden agorɔ? εε Portia eden agorɔ na mo di no
ewɔ?
- 401 Portia. : Ye bɔ bɔɔl
- 402 Tr. : Ye bɔ bɔɔl. enna mo sane ye den?
- 403 Portia. : Ye toto **net ball**
- 404 Tr. : Ye toto **net ball**. enna mo sane ye den?
- 405 Portia. : Ye bɔ ampe
- 406 Tr. : Ampe. Mo sane
- 407 Chn. : Yebɔ **skipping**
- 408 Tr. : **Skipping**, okay. Agorɔ ben bio? enna mo taa diee?
Yes
- 409 Chd. : Ye kɔdi agorɔ
- 410 Tr. : edeben agorɔ?
- 411 Chd. : Ye bɔ bɔɔl
- 412 Tr. : Bɔɔl obi aka
- 413 Chd. : Ye sɔ
- 414 Tr. : Ye sɔ mbaa no sɔ. Aha
- 415 Chd. : Ye di brobbey.
- 416 Tr. : Ye di brobbey. Angyie wo pe se wo ka asem fofroɔ.
hein? Den bio na mo diee?
- 417 Angelina: Yedi kwakwa
- 418 Tr. : Kwakwa
- 419 Chn. : **Sir, sir**
- 420 Tr. : Saa na etee deɛ a, kɔ yi εε
- 421 Chd. : Twi
- 422 Tr. : Mo Twi no bra. Na yede nsem be hyehye mu.
- 423 Chn. : Eei! Ma no enye mmre o! Tikya ma no nye mmre o!
Sir, Emma se eye a ma Makaranta mbra.
- 424 Tr. : Ane ye hyehye Makaranta borɔfo
- 425 Chn. : Hey! wei deɛ yen ntumi
- 426 Tr. : Se ha ya pipa Makaranta. **Okay** mbe pepa na wo de
Mampong no ahye mu. enna aha no yɛbe pipa Mr Boamah. **Okay** ye
be pipa panin
- 427 Chd. : Me deɛ me ntumi o!
- 428 Tr. : Mbe twere no wɔ asee ha
- 429 Chn. : **Yes**
- 430 Tr. : Yebe pipa mmeensa mmeensa, nnuaba, nnuaba. Afei
deɛ aka no, me gyae deɛ aka no wɔ hɔ. eye a na moa mo atwere.
Makaranta Borofo. Me pe se wo be twere no kamakama
- 431 Chn. : Anne saa deɛ yebe tumi
- 432 Tr. : Makaranta Mampong, dubaako mmeensa

APPENDIX 5 (14) TD :Science

LESSON	:	FOURTEEN
SCHOOL	:	MAKARANTA BOR \supset FO
CLASS	:	P3
TEACHER	:	"TD"
SUBJECT	:	ELEMENTARY SCIENCE
TOPIC	:	LIQUIDS: FORMS OF WATER
DATE	:	29TH FEBRUARY, 1996
1	Tr.	We are starting a new topic. That is liquids. What class is this?
2	Chn.	P3
3	Tr.	P3. Okay. We have liquids. Liquids all of you.
4	Chn.	<u>Liquids</u>
5	Tr.	<u>Liquids</u>
6	Chn.	<u>Liquids</u>
7	Tr.	Now we have so many types of liquids. So many types. Differences of liquids. Water is an example of liquid. I have given you one. Who can tell me another liquid? Another liquid. Yes. Give me another example of liquid. I have given you water. Water is a liquid. Aha! What again? Yes.
8	Chd.	Sugar
9	Chn.	Eei!
10	Tr.	Oh no, no, no. em I have told you that I have started new topic. That is liquids and I have given you an example of liquids. Water is a liquid. em palm wine, do you know palm wine?
11	Chn.	Yes sir.
12	Tr.	Nsa fufuo. Mo anom bi da?
13	Chn.	Mm
14	Tr.	Okay , enno nso ye liquid. Palm wine. Yes give me example. Another example. Aha!
15	Chd.	Sugar.
16	Tr.	Adee bi a aye se nsuo nsuo a wo som a enye yiye no ye fr̄e no liquid. Se wahunu Ma ma water and ma ma palm wine se ne mmeinu ye eḍen? Liquids. Aha!
17	Chd.	Anwa
18	Tr.	Anwa ne Bor\supsetfo ye ka no sen?
19	Chd.	Palm oil
20	Tr.	Ah?
21	Chd.	Palm oil
22	Tr.	Oil, oil all of you
23	Chn.	Oil
24	Tr.	Vegetable oil
25	Chn.	Vegetable oil
26	Tr.	Vegetable oil
27	Chn.	Vegetable oil

- 28 Tr. : And somebody said another one. Palm oil, palm oil
 29 Chd. : **engu**
 30 Tr. : **engu ne wei ye anwa.wei ye nsa fufuo, palm wine.**
enna wei yeden? Nsuo, water. Yes another one. **Aha!**
 31 Chd. : Coke
 32 Tr. : Coke, Coke
 33 Chd. : Fanta
 34 Tr. : Fanta
 35 Chd. : Coca cola
 36 Chd. : Malt
 37 Tr. : Tell me another one
 38 Chd. : Guinness.
 39 Tr. : **ehē!** Guinness **ne nyinaa eye den?** Liquids. But **nsa mu nso ya nya coke, ya nya fanta, ya nya palm wine.** Afei another one. What do we put in car? Car, what do we put inside so that it moves?
 40 Chd. : Petrol.
 41 Tr. : Petrol, kerosene, petrol.
 42 Chd. : Petrol
 43 Tr. : Petrol. You put petrol in cars so that it can move. Yes!
 44 Chd. : Kerosene
 45 Tr. : Kerosene. Very good. Kerosene, yes, yes. Gas oil
 46 Chd. : **Ngu**
 47 Tr. : Somebody has said palm oil and you come back to tell us **ngu. Mum?** Then we have gas oil
 48 Chd. : **Adwe ngu.**
 49 Tr. : Okay, palm kernel oil. You have what? Palm oil, **adwe ngu enne ngu. Ade koro nua.** Palm oil **nono**, Aha! What other thing again? The hole topic of turpentine. All of you.
 50 Chn. : Turpentine
 51 Tr. : Turpentine
 52 Chn. : Turpentine
 53 Tr. : **ee eye liquid wo k carpenterfo h a w m ye**
adwuma yedi efra ayi adee noa w m de polish nkonnwa no ho no.
Mhum, yede fra turpentine, turpentine. All of you.
 54 Chn. : Turpentine
 55 Tr. : Turpentine
 56 Chn. : Turpentine
 57 Tr. : We have water, palm wine, vegetable oil, palm oil, coke, fanta, petrol, kerosene, gas oil turpentine. These are all what? They are all what? **Aha?** What's here? They are all what? Emma they are all what?
 58 Emma. : Liquids
 59 Tr. : They are all what?
 60 Tr+Chn.: Liquids
 61 Tr. : Liquids all of you.

- 62 Chn. : Liquids
 63 Tr. : Liquids
 64 Chn. : Liquids
 65 Tr. : Liquids. Now when we talk of liquids. A liquid takes the shape of the container. Ye ka liquids a, adee bia wode gu ebia tua mu na sewode gu adee bia wode be gu mo no efa adee no shape no . eye eden?
- 66 Tr+Chn.: Liquid
 67 Tr. : Biribi te se keresin wode gu tua mu a, se enne tua no aye pe.
- 68 Chn. : Yes sir.
 69 Tr. : Se wo hwee gu cup mu a, wo behunu se enne cup no ayeden? Na enne bucket no aye den?
- 70 Tr+Chn.: Pe
 71 Tr. : Aye pe but yede gu cup mu a, wobe hunu se na enne cup no aye den? eye
- 72 Chn. : Pe.
 73 Tr. : Nti saa enneema mu a etumi be form adee no enna yefre no se den?
- 74 Tr+Chn.: Liquid
 75 Tr. : Now if you have known all these as liquids. Then we are going to treat what? Water. Se ye se yefre wei no mu nyinaa se liquids a, yebe ye nsuo eho aduma. But before then put these in your heads. Water
- 76 Chn. : Water
 77 Tr. : Water
 78 Chn. : Water
 79 Tr. : Palm wine
 80 Chn. : Palm wine
 81 Tr. : Vegetable oil
 82 Chn. : Vegetable oil
 83 Tr. : Palm oil
 84 Chn. : Palm oil.
 85 Tr. : Coke
 86 Chn. : Coke
 87 Tr. : Fanta
 88 Chn. : Fanta
 89 Tr. : Petrol
 90 Chn. : Petrol
 91 Tr. : Kerosene
 92 Chn. : Kerosene
 93 Tr. : Gas oil
 94 Chn. : Gas oil
 95 Tr. : Turpentine
 96 Chn. : Turpentine

- 97 Tr. : [Writes words on the bb]. Okay now we are going to treat water. Of liquids we know that we can use water in so many ways. Water is used for what? For!
- 98 Chd. : Drinking
- 99 Tr. : Drinking. Oh say it. Ruth water is used for what?
- 100 Ruth. : Drinking
- 101 Tr. : Drinking, drinking. We use water to drink. What again? For? what do we use water for? Yes.
- 102 Chd. : Washing
- 103 Tr. : Washing, washing clap for him.
- 104 Chn. : [Clapping]
- 105 Tr. : What again do we use water for? Yes.
- 106 Chd. : Washing
- 107 Tr. : We have said washing. So the same thing. Yes. Then for what?
- 108 Chd. : Washing.
- 109 Tr. : Washing what?
- 110 Chd. : The bathroom.
- 111 Tr. : The bathroom okay
- 112 Chn. : Bathing
- 113 Tr. : Very good. For bathing. And then what again? We use water to clean things. hein?
- 114 Chn. : Yes sir
- 115 Tr. : Okay, so we have so many ways of using water. And for what? Building what? Houses. We use water to build houses. **Yesi dan nea yen fa nsuo?**
- 116 Chn. : Yes sir.
- 117 Tr. : **Yede nsuo na esi dan.** Without water you cannot make the cement and then eh, mix the cement and then the sand to get what? Block. So is water that will help it to put together. And form what? A very solid block. So water is used in so many ways. Now, eh, water is seen in three phases. It's used for bathing, washing, building, cleaning and irrigation. Irrigation **dee mo nte ase me boa anaa?**
- 118 Chn. : Yes sir
- 119 Tr. : **Okay, yetumi eye dam.** Yetwa tade bi na ye de pipe a connecti na yede k nfuom. Nti yebue, na yetu gu enneema no so. Se wahunu? Yetu gu so ara, na ama nneema no aye den?
- 120 Chn. : Anyini
- 121 Tr. : Ye use no mmre a nsuo enye den?
- 122 Tr+Chn.: **ent**
- 123 Tr. : **Dry season.** Nti se eduru saa bre no a, ekyere se nsuo no ye bue a, na whee na yetu gu nneema no so sa na ama enneema no aye yiye. enno na yefre no edeben? **Irrigation.** enna nyankop nso w t nsuo a, na agu enneema no so, na ama enneema no aye den? Anyini. Nti se nsuo enne h nom a, enneema no nso entumi enye den? entumi enye yiye. Me boa?

- 124 Chn. : **Yes sir.**
- 125 Tr. : Nti saa nneema yei na yede nsuo ye. **Sit down.** Saa nneema yei na yede nsuo eye. **Now,** wa hunu se, maka akwere wo se nsuo yehunu no ewo nneema meensa mu Yehunu nsuo ewo ennooma mmeensa mu. ennooma mmeensa a, yehunu nsuo wom no enne dee ehein? Fa eye no. **Take that one.**
- 126 Chd. : enti eda he?
- 127 Chd. : eda adee no mu
- 128 Tr. : **Okay water is in!.....** Yehunu nsuo ewo enneema mmeensa mu. **Water is seen in three stage. The three stages are.** Yehunu nsuo **one.** Yehunu no **as what? Liquid, liquid.** Yehunu nsuo ewo **liquid. Liquid all of you.**
- 129 Chn. : **Liquid**
- 130 Tr. : **Liquid**
- 131 Chn. : **Liquid**
- 132 Tr. : Se wahunu se me sa nsuo ye bia. wahunu se eye den? Se wahu.
- 133 Chn. : **Yes sir**
- 134 Tr. : etumi firi me nsam ko. Nti enno yeden? **It's liquid.** Yahunu baako. enna yebe sane ahunu nsuo nsoso ya eye **very block.** se wahunu? Nsuo yehunu no wo **block** mu a yefre no sen? Nsuo a aye den no yefre no sen? Nsuo a eye den,eye den.
- 135 Chn. : **Block**
- 136 Tr. : Wei yefre no sen?
- 137 Chn. : **Block**
- 138 Tr. : [Gives solid refrigerated ice water to some Chn to handle]
- 140 Chn. : eee ye!
- 141 Tr. : enti yefre no se **ice block.** Se wahunu? eye **ice block.** Som hwe. Som. eye nsuo o!
- 142 Chn. : eye nsuo
- 143 Tr. : eye nsuo enne yei.
- 144 Chd. : Ne nwunu, wobe gya atoh.
- 145 Tr. : Se wa hunu? Seesei ya hunu se nsuo, yahunu no wo **liquid** mu. enna ya sane ahunu no sen? **Solid** wei. Yefre no sen? **Solid all of you.**
- 146 Chn. : **Solid**
- 147 Tr. : **Solid**
- 148 Chn. : **Solid**
- 149 Tr. : eye den, me boa?
- 150 Chn. : **Yes sir.**
- 151 Tr. : Adee a eye den na yefre no sen?
- 152 Tr+Chn.: **Solid**
- 153 Tr. : ebo, aye **very solid,** me boa?
- 154 Chn. : **Yes sir.**

- 155 Tr. : Nti se yepe se yetumi ede nsuo eye **block** a yede hye he?
- 156 Chn. : **Fridge** mu.
- 157 Tr. : **Fridge** [refrigerator] mu. yede hye **fridge** [refrigerator] mua, na a **cool** lu no na abehye dendenden. Afei yetumi yi kuta. Nsuo se ewo **bucket** mu a wo betumi ayi akuta?
- 158 Chn. : **No sir.**
- 159 Tr. : Wo betumi ayi nsuo no nawa kuta ako?
- 160 Chn. : **No sir.**
- 161 Tr. : Wo nduru no na aye den?
- 162 Chn. : Asa.
- 163 Tr. : ebeye den na asa?
- 164 Chn. : ebe nwunu.
- 165 Tr. : ebe nwunu se wa hunu? ebe nwunu. Afei dee ya hunu mmeinu nono. Yahunu **liquid. Water in liquid form. Water in liquid form** enna **water in what? Block form.** enno na yefre no sen? **Ice water. Water in solid, solid form. The last one.** eh, Yahunu **water in liquid form.** enna **water in solid form.** Aka baako. Nsuo se yede si gya soa, ebe ye den asa . Na anhwei angua?
- 166 Chn. : egya, ntutuo, ntutuo.
- 167 Tr. : **Vapour, vapour all of you.**
- 168 Chn. : **Vapour.**
- 169 Tr. : **Vapour**
- 170 Chn. : **Vapour**
- 171 Tr. : Ntutuo aye se **steam** se wahunu? Wobe hunu se na ntutuo no a efiri mu. Na efiri mu. Afei wobe hwe a, na nsuo no na aye den?
- 172 Chn. : Asa.
- 173 Tr. : eye hyehyehye tuaso a, ehuru a na aye den?
- 174 Chn. : Na ewia
- 175 Tr. : Na ewia. Nti **water in liquid form, solid form enna water in gas form. Gas**
- 176 Chn. : **Gas**
- 177 Tr. : **Water vapour** no a eba no. Nsuo no a ye nuwa seesei a yebe hunu. wobe hunu se na nsuo eye den? Na etu tutuo saa. Afei wobeko ako hwe no na aye den? Na asa.
- 178 Chn. : Na awi
- 179 Tr. : Na awi. ewi a, ne nyinaa fra mframe Se efra nframe no mo a, mframe no a afr no no edesen?
- 180 Tr+Chn.: **Gas**
- 181 Tr. : **Gas.** Se wahunu? aye ntutuo yen hunu bio! Se wa hunu? Nti ye wo nsuo ewo ennooma mmeensa mu. Ye wo **liquid, solid and then**
- 182 Tr+Chn.: **Gas.**

- 183 Tr. : **Gas or vapour . Water in liquid form, water in solid form, water in gas or vapour form Liquid all of you**
- 184 Chn. : **Liquid.**
- 185 Tr. : **Solid**
- 186 Chn. : **Solid**
- 187 Tr. : **Gas**
- 188 Chn. : **Gas**
- 189 Tr. : **Or vapour**
- 190 Chn. : **Or vapour.**
- 191 Tr. : **So water is seen in three stages. The stages are liquid, solid gas or vapour. Okay, ya anya ahunu nsuo wɔ liquid form yi. Ya hunu solid form yi. Yahunu gas form yi. Yɛbɛ yɛ experiment ahwɛ sɛ ɛyɛ nokware a sɛ nsuo yɛhunu no wɔ ɛnnɛɛma mmeɛnsa mu. Yɛbɛ yɛ na yahwɛ. We are going to do an experiment. We are going to use water to see if we can get, what? Vapour or gas and then we have water in block form. Yɛbɛ na ne no ahwɛ sɛ ɛbɛtumi abɛ yɛ nsuo a. Sɛ wahunu? seesei no block noa ɛdhɔ no, yɛbɛ nya ɛnnɛɛma mmeɛnsa na afirm. Yɛbɛ nya liquid. Seesei a yɛ wɔ block. ɛnna yɛwɔ dɛn? Liquid. Yɛbɛ nane no. ɛnane a, na abɛ yɛ dɛn? Na abɛyɛ liquid. Sɛ wahunu? Na abɛ yɛ nsuo. Sɛ yɛ heati no a, ɛbɛyɛ dɛn? ɛbɛba abɛyɛ dɛn?**
- 192 Chn. : ɛbɛ yɛ **gas**.
- 193 Tr. : **Gas** sɛ wahunu? Nti ya hunu nsuo ɛwɔ ɛnnɛɛma mmeɛnsa mu: **solid, liquid, and then**
- 194 Tr+Chn. : **Gas.**
- 195 Chn. : [Kasa]
- 196 Tr. : Sɛ yɛ ahu **water in three stages, solid, liquid and then gas.** ɛɛ mebe hwei nsuo no asiso. Yɛhwɛ deɛ ɛbɛ yɛ. Yɛhwɛ nsuo noa deɛ ɛbɛyɛ. **I have told you which this water that comes out when you boil or when you are cooking food that water is called what?**
- 197 Chn. : **Gas**
- 198 Tr. : **Gas or vapour. Okay and the water that you drink, the water that you drink is called**
- 199 Chd. : **Liquid**
- 200 Tr. : **Liquid all of you.**
- 201 Chn. : **Liquid**
- 202 Tr. : **Liquid.**
- 203 Chn. : **Liquid**
- 204 Tr. : ɛnna **the water that is found as stone, is found as solid, block is known as solid and then gas. Solid, liquid gas, so, sɛ wo ahwɛ a, saa liquid yi ɛnna yɛ sesano ɛma no beyɛ dɛn? Solid.** Nsuo deɛ yɛnom no na yɛ de ɛgu **frige** [refrigerator] mu, me boa?
- 205 Chn. : **Yes sir.**
- 206 Tr. : Na aye very hard. Sɛ ɛyɛ **hard** a, yɛfrɛ no sɛn?
- 207 Tr+Chn.: **Solid**

- 208 Tr. : **Or ice block.** Na **ice block** koro noa no, se ye kase ye dane no a, ebēba abe ye **liquid**. Se wahunu? eye **liquid** hwei a, ebē sane asesa abeye den? **Gas** ye **heat** noa. **Okay**, mo ma yen noa **block** no ma yen hwe ma yen hwe enno na ebek ntēm. Se wahunu se tutuo no ēba. Mo mbra mbēhwe.
- 209 Chn. : Me paa wo kyeew yen hunu ye
- 210 Tr. : **Line** wei, **line** wei
- 211 Row 1. : Eei ēba!
- 212 Tr. : **Line** wei mbra. **Sit down**
- 213 Row 2. : Eei!
- 214 Tr. : **Come, come and see.** Wahu bi? **Okay, let's see what comes out**
- 215 Chn. : etu k, etu k
- 216 Tr. : **You see that after heating, when you continue something will be coming out of the water.. And that is what is called water vapour or gas. Water in gas form.** Se wahunu se biribi efiri mu ēba?
- 217 Chn. : **Yes, sir**
- 218 Tr. : enna biribi so w wei sei so
- 219 Chn. : **Yes, sir**
- 220 Tr. : Aha fa wo nsa ka. Yede nsuo gu ha? Nso fa wo nsa ka Se wahu? Wahunu se nsuo abe yewo nsam?.
- 221 Chn. : **Yes, sir**
- 222 Tr. : Nsuo no a ewe yei mu no, enna yekata so no abe ka ha. Dee etuo no aba ne tiri no so.
- 223 Chn. : **Yes, sir, sir.**
- 224 Tr. : Wahunu yefre no sen? W
- 225 Tr+Chn.: **Gas**
- 226 Chn. : **Water in gas form.** enti ye kataa so ara, **sit down.**
- 227 Tr. : Se ye noa nsuo na se ye kataa so a, nsuo no a ebe tuo no, ya yefre no gas no. Adeē yede akata so no wobe hunu se na ne nyinaa aba adee no so. Na yefre biribi **condense. Condense all of you.**
- 228 Chn. : **Condense.**
- 229 Tr. : **Condense.**
- 230 Chn. : **Condense.**
- 231 Tr. : **Condense.**
- 232 Chn. : **Condense.**
- 233 Tr. : **Okay eh**
- 234 Chn. : Talking together.
- 235 Tr. : **Na Condense no**
- 236 Chn. : Talking together
- 237 Tr. : Na **condense** no, se ye kase **condense** a, **keep quiet.** Ye kase **condense** a, tutuo no, enna biribi akyere no, se wahunu? egye noa, na nsuo no aye den? Ak kano. Na mframa be wei akyire no, eye nwunu se wahunu? enna tutuo no so a ēba no eye hye. Nti mframa no

- enam se eye nwunu no nti no se ebe ka wei a, na se tutuo no so a efiri ayi no mu eba se eka no a, wobe hunu se na aye den? Aye nsuo. Se yede kɔ ayi mua, sedee nsuo sitɔ ara, saa adee no bi enna eye ema eye den?
- 238 Tr+Chn.: etɔ
- 239 Tr. : Awia bɔ ara, na asase so nsuo nyinaa ne nwira ne ndua nsuo ewɔsoɔ no, na ntutuo efiri mo na ekɔ soro. Se wahunu? ekɔ soro a, ekorɔ no, enno eye hye. eye hye se nsuo hye no. Wahu se ntutuo no eba? Afei dee mo ahunu se entutuo no, vapour, se mo ahunu?
- 240 Chn. : **Yes sir.**
- 241 Tr. : Wei na me se yefre no sen?
- 242 Chn. : **Gas**
- 243 Tr. : **Gas. What in what form?**
- 244 Chn. : **Gas**
- 245 Tr. : **Gas form.** Se wahu. Se afei dee mo ahu?
- 246 Chn. : **Yes sir.**
- 247 Tr. : **Okay,** nti se
- 248 Chn. : Wobe bue so a
- 249 Tr. : Me eka **condense form** no, hwe ye nfa nsuo egu wei sei so, eso wahu se nsuo eba. Se wahunu?
- 250 Chn. : [Laughing]
- 251 Tr. : Wahunu se nsuo no etotɔ fam?
- 252 Chn. : [Laughing].
- 253 Tr. : Se wahunu eye hye
- 254 Chn. : Eei!
- 255 Tr. : Se wahu, ye anfa nsuo angu ha. Yede nso gu ha?
- 256 Chn. : **No sir.**
- 257 Tr. : **But** ye bua so no, nsuo no ebeka ayi no, enna mframa no so a efa ekyire no eye nwunu. Nti ebeka no saa no enna enna esane ye den?
- 258 Chn. : Nsuo
- 259 Tr. : Nsuo
- 260 Chd. : Nsuo, nsuo
- 261 Tr. : Saa na nsuo etɔ eye
- 262 Chd. : **Yes sir.**
- 263 Tr. : Nti wa hunu se awia no bɔ saa na ekɔ soro. Se ekɔ soro wo be hunu se . Hwe me pipa ha nyinaa. Fa wo nsa ka. Wahunu se nsuo nni hɔ?
- 264 Chn. : **Yes sir.**
- 265 Tr. : Ma pipa, nsuo nihɔ. Ye sane ede akata so
- 266 Chn. : Nsuo beba so/nsuo emba. [simultaneous production].
- 267 Tr. : Nsuo etɔ a, saa na eye. Awia bɔ na asase no nsuo ewɔ so nyinaa na atu kɔ soro. emframa noa ekɔ no, ya ede nsuo no koro no, eye hye.

- 268 Chn. : **Yes sir.**
- 269 Tr. : enno nti mframa enam ewiram ne eweim akirikyiri no
nti se ek⊃ ka, ek⊃ hyia mframa no a eye nwunu a, na aka abom,
ekabom saa na wobe hunu se na aye nwunwunwu. afei na abe te h⊃ se
eb⊃, se wahunu? Ayi, **clouds**. Wahu, enno nso betre h⊃ na aye den?
Aye tuum, me boa?
- 270 Chn. : **Yes sir.**
- 271 Tr. : ewei mu enye tuum?
- 272 Chn. : **Yes sir.**
- 273 Tr. : eye tuum a nsuo no afei na afra enne dee ehyaie no.
Mframa hyehyee enne mframa nwunwuno k⊃ hyia ye no, na ak⊃ ye
den? ak⊃ ye **condense**.
- 274 Chd. : **Condense.**
- 275 Tr. : Nti na ew⊃ se eye den?
- 276 Tr+Chn.: et⊃
- 277 Tr. : eba fam se eden?
- 278 Tr+Chn. : Nsuo no.
- 279 Tr. : Saa bi na wei no eye. Se wahunu? Se wahunu? Se
wahunu se aye nsuo?
- 280 Chn. : Eei!
- 281 Tr. : Se afei dee mo ate ase?
- 282 Chn. : **Yes sir.**
- 283 Tr. : enti nsuo a ew⊃ **solid form** no yefre no **ice block sir**.
Nsuo a yenom no yefre no sen? **Liquid**. enna nsuo a eye tutuo no yefre
no sen?
- 284 Tr+Chn. : **Gas.**
- 285 Tr. : **Okay**, saa na etee dee a, me bisa mo **question**. Me se
nsuo a yenom no me se yefre no sen?
- 286 Chn. : **Drink /water** [simultaneous production]
- 287 Tr. : **No, no, no**, ehein
- 288 Chn. : **Liquid**.
- 289 Tr. : **Atta. Clap for Atta.**
- 290 Chn. : [nsam mm⊃: clapping]
- 291 Tr. : Nsuo ew⊃ **solid form**. eti se boa no so me se yefre no
sen?
- 292 Chn. : **Liquid**
- 293 Tr. : Nsuo ew⊃....ehein?
- 294 Chn. : **Ice block**.
- 295 Tr. : Mese yefre no sen? **Ice block**. Ne din baako mese yefre
no sen?
- 296 Chn. : **Gas**
- 297 Tr. : **No, no. Aha?**
- 298 Chd. : **Solid**
- 299 Tr. : **Solid**.
- 300 Chn. : **Solid**.

- 301 Tr. : **Liquid**
- 302 Chn. : **Liquid**
- 303 Tr. : **Gas.**
- 304 Chn. : **Gas.**
- 305 Tr. : Na nsuo a etuo no, etu efiri ade hyehye mu no, yefre no sen?
- 306 Chn. : **Gas**
- 307 Tr. : Gas all of you.
- 308 Chn. : Gas
- 309 Tr. : Or vapour.
- 310 Chn. : Or vapour.
- 311 Tr. : Gas
- 312 Chn. : Gas
- 313 Tr. : Vapour
- 314 Chn. : Vapour.
- 315 Tr. : Okay, solid
- 316 Chn. : Solid
- 317 Tr. : Solid.
- 318 Chn. : Solid.
- 319 Tr. : Liquid
- 320 Chn. : Liquid.
- 321 Tr. : Okay, **me bisa wo** question **fofor**. Se ye bua aduane a ye noa so a, na se ntutuo no a eba no, esane sesa be ye den? Ntutuo no a efiri aduane no mu a eba no, se ye bua so a esesa be ye den?
- 322 Chd. : ebe ye nsuo.
- 323 Tr. : **esesa be ye nsuo. Na me kyere mo no ne borfo yefre no sen? Aha**
- 324 Chd. : Condense.
- 325 Tr. : Condense all of you.
- 326 Chn. : Condense
- 327 Tr. : Condense
- 328 Chn. : Condense
- 329 Tr. : Again
- 330 Chn. : Condense
- 331 Tr. : Condense
- 332 Chn. : Condense
- 333 Tr. : Condense Water is found in how many stages?
- 334 Chn. : Three
- 335 Tr. : Three stages
- 336 Chn. : Three stages
- 337 Tr. : The first stage is known as what? What is the name of the first stage? Yes.
- 338 Chn. : Liquid.
- 339 Tr. : Liquid all of you.
- 340 Chn. : Liquid

- 341 Tr. : Liquid
- 342 Chn. : Liquid
- 343 Tr. : The second stage **no me se yefre no sen?** The second stage, yes.
- 344 Chn. : Gas
- 345 Tr. : No, the second stage
- 346 Chn. : [Talking together].
- 347 Tr. : Aha.
- 348 Chd. : Solid
- 349 Tr. : Solid all of you.
- 350 Chn. : Solid
- 351 Tr. : Solid.
- 352 Chn. : Solid.
- 353 Tr. : Put it in your head. Solid
- 354 Chn. : Solid.
- 355 Tr. : Again.
- 356 Chn. : Solid.
- 357 Tr. : What other name do we give to the solid water? **edin fofor** **ben na yede ma nsuo a eye solid no ? edin ben a?**
- 358 Chd. : Gas
- 359 Tr. : No. **edin ben na yede ma nsuo a yetumi kuta no? Yetumi de kuta yen nsam mu no?**
- 360 Chn. : Ice block.
- 361 Tr. : Ice block all of you.
- 362 Chn. : Ice block.
- 363 Tr. : Ice block.
- 364 Chn. : Ice block.
- 365 Tr. : Ice block.
- 366 Chn. : Ice block.
- 367 Tr. : **Na**, if we cook the water, what comes up like this one, is known as what?
- 368 Chn. : Gas.
- 369 Tr. : Gas all of you.
- 370 Chn. : Gas
- 371 Tr. : Gas
- 372 Chn. : Gas
- 373 Tr. : Or vapour.
- 374 Chn. : Or vapour..
- 375 Tr. : Gas or vapour.
- 376 Chn. : Gas or vapour.
- 377 Tr. : Okay, **na ye kata soa**, if we cover our food or our water, that is being heated the water that comes under the lid is done by what means? **shein?** By what means
- 378 Chd. : Condense.
- 379 Tr. : Condense all of you.
- 380 Chn. : Condense.
- 381 Tr. : Clap for Ruth

- 382 Chn. : [Clapping]
 383 Tr. : Condense, condense, it condenses. So here we have the water to be in three stage. Liquid, solid gas. Gas solid liquid. enti
 384 Chd. : **Wɔse condense.**
 385 Chd. : **ɛɛn nea?**
 386 Tr. : **Twa!** Atua! [co-operation] **enti** last week **yɛ yɔ** liquids [writes on the bb] Gas, the gas will become what? Liquid and then change to become what? Solid
 387 Chn. : [Talking together]
 388 Tr. : **Sɛ yɛyɔ ayi a.** We have liquid solid and then
 389 Tr+Chn. : Gas
 390 Tr. : Sɛ yɛ nya nsuo no a, **ordinary water** noa, yɛ betumi ama no abɛ yɛ sɛ ɛboɔ, sɛ wahu **by freezing it. Okay,** sɛ yɛ **freeze** wei a, yɛbɛ tumi asane abɛ yɛ
 391 Tr+Chn. : **Gas.**
 392 Tr. : Sɛ yɛde **ice block** no bɛto ha, yɛbɛ hunu sɛ ntutuo ɛfiri mu
 393 Chn. : [Talking together]
 394 Chd. : Wo nkɔ fa mba. Sɛ mframa fa so a, a nane.
 395 Chd. : Eei Portia nono
 396 Tr. : Sɛ wahu, ɛɛ, **the same vapour** no. Gye, gye. **The same vapour** no a ɛfiri wei sei mu no ɛso ɛfiri wei sei mu korɔ?
 397 Chn. : **Yes sir**
 398 Tr. : Sɛ wahunu?
 399 Chn. : **Yes sir**
 400 Tr. : ɛkyire sa **vapour** no a ɛfiri ha sei no ɛnno na ɛfiri wei so ɛkɔ. Yɛde adeɛ kata so a, wobɛ hunu sɛ ne nyinaa bɛba abɛka adeɛ no. ɛbetu abɛ ka no. Na ya sane anya dɛn? Nsuo. Nti **the gas will become what?**
 401 Tr+Chn. : **Solid.**
 402 Tr. : Sɛ wahuu
 403 Chd. : Medɛɛ fa kɔ to hɔ
 404 Chd. : Obia ntenase.
 405 Tr. : **Okay, sit down. Okay,** yɛba abɛ **try another experiment**
 406 Chn. : [Talking together].
 407 Tr. : Sɛsei yɛ nyinaa ahunu sɛ, sɛ na adeɛ bi wom. Ade yɛ aka ketewaa bi. Yɛbɛ hwɛ sɛ **ice block** no yɛ nane no a ɛbɛ yɛ yiye a
 408 Chd. : **Yes** ɛbɛ yɛ nwunu
 409 Chd. : Mbɛ nom **ice block**
 410 Tr. : Wahunu sɛ nsuo bia ɛnim?
 411 Chn. : **Yes sir.**
 412 Tr. : **There is no water. Okay** yɛde weisei ɛtum, **ice block** no. Yɛde tum na yahwɛ
 413 Chd. : Tafire
 414 Tr. : Yɛhwɛ sɛ ɛbɛ dane nsuo a

- 415 Chn. : εβε dane.
 416 Tr. : **Okay, look at it.** Nsuo w▷ so?
 417 Chn. : **No sir.**
 418 Tr. : **There is no water. Let's see, εh come and see.** Mo
 nhwe yiye na mo anka ayi no anto antwene.
 419 Chn. : Talking together.
 420 Tr. : **The vapour is coming**
 421 Chn. : [Talking together]
 422 Tr. : εye, εye, εye.
 423 Chn. : [Talking together].
 424 Tr. : **Sit down, sit down, sit down.**

APPENDIX 5 (15) TE: English

SCHOOL : MAKARANTA BOR-FO
 CLASS : P4
 TEACHER : "TE"
 SUBJECT : ENGLISH LANGUAGE
 TOPIC : CLOCKS AND WATCHES
 DATE : 28TH FEBRUARY, 1996

- 1 Tr. : We are in unit nine
- 2 Chn. : [Talking together]
- 3 Tr. : The topic is clocks and watches. All of you..
- 4 Chn. : Clocks and watches. [Followed by talking together]
- 5 Tr. : [Writes on the board].
- 6 Chn. : [Talking together]
- 7 Tr. : Okay we are going to discuss the picture first.
- 8 Chn. : [Talking together]
- 9 Tr. : What is in the picture?
- 10 Chd. : [Inaudible].
- 11 Tr. : Who?
- 12 Chd. : [Inaudible]
- 13 Tr. : We are doing English so you have to put everything in English. Aha. Who do you see, who do you see there?
- 14 Chd. : [No response]
- 15 Tr. : I can see. Say I can see. One person, if you want to talk you raise up your hand and you start by saying I can see. Then you add what you see in the picture.
- 16 Chd. : I can see a sun.
- 17 Tr. : Eh Karikari says he can see the sun. Who else? I can see a man. The man is holding a spear. Spear all of you.
- 18 Chn. : Spear
- 19 Tr. : Again
- 20 Chn. : Spear
- 21 Tr. : Aha what the man is holding is known as a spear. The man has put the left hand on the fourhead[forehead]. This place we call it fourhead (for forehead)
- 22 Chn. : Fourhead [for forehead].
- 23 Tr. : Fourhead [for forehead]. Okay he has put the left hand on the fourhead [forehead] What does it mean? When he is looking up here
- 24 Chd. : [Inaudible]
- 25 Tr. : Somebody says he is looking at the time. What else? Who else has something to say. Okay the man is an ancient man. In the olden days our people were wearing animal skins as their clothes. Do you all see it?
- 26 Chn. : Yes Madam.

- 27 Tr. : It is the skin of the animal that the man has sewn into an attire. This man wants to know the time but at that time there was no watch or clock so this eh, wall clock, all of you.
- 28 Chn. : A wall clock.
- 29 Tr. : Again.
- 30 Chn. : A wall clock.
- 31 Tr. : This is a table clock.
- 32 Chn. : A table clock.
- 33 Tr. : Again.
- 34 Chn. : A table clock.
- 35 Tr. : What name do you usually give to this thing that I am holding. Have you all seen it.
- 36 Chn. : Yes Madam.
- 37 Tr. : What is the name? If you know the answer raise up your hand before you say it. Samuel.
- 38 Samuel : A hand watch
- 39 Tr. : Any contribution? Who else has something to say? We call it wrist watch. all of you.
- 40 Chn. : Wrist watch.
- 41 Tr. : [Writes on the board] So this is a wrist watch. You call it wrist watch because we use it at our wrist. This place is called wrist. All of you.
- 42 Chn. : Wrist
- 43 Tr. : Again
- 44 Chn. : Wrist
- 45 Tr. : That is why we say it is a wrist watch. Okay I am going to tell you the history about the watch. In the olden days there was, there were no wrist watches or table clock. What our people use to tell the time was the sun. When they want to know the time they go to stand in front of the eh, eh,
- 46 Chd. : House
- 47 Tr. : Eh, house or in the middle of the house and see their shadow. When they see that their shadows are just near their feet, it means the time is twelve o'clock . and when it is tall eh, they will say six. The time is six o'clock in the evening. They were telling the time with their shadow and at the same time with the sun. When the time, when they got up in the morning. You tell that the sun was there. But now see that it is coming near us. When it is twelve it will be here. When you raise up your head you see that you can't look at it. It is moving. They were using the sun as their watches. So the man that you see in the picture is using the sun as his watch. This is all that you see in the picture. Okay. The new words that we have here are strike..
- 48 Chn. : Strike
- 49 Tr. : Strike
- 50 Chn. : Strike
- 51 Tr. : Pocket watch
- 52 Chn. : Pocket watch

53 Tr. : Again
 54 Chn. : Pocket watch
 55 Tr. : [Writes on the board] Here we have tick tack. Look
 here look on the board. Tick tack.
 56 Chn. : Tick tack.
 57 Tr. : Again
 58 Chn. : Tick tack.
 59 Tr. : When you see this kind of watches the noise will be
 keke, tick tack, tick tack. Listen, do you hear it?
 60 Chn. : Yes Madam.
 61 Tr. : Do you hear the noise?
 62 Chn. : Yes Madam
 63 Tr. : You, also listen
 64 Chn. : Listen
 65 Tr. : Do you hear?
 66 Chn. : Yes Madam.
 67 Tr. : The noise that it, the watch is making is called tick tack.
 68 Int. : Noise from next class.
 69 Tr. : Yes here the. When he has some clock. When it is
 twelve o'clock, you hear that it is making noise. This one is not
 making. When you go to Kumasi and it is twelve o'clock. You see the
 bell ringing. Don't you hear Roman ~~edon~~. Haven't you all heard of it?
 70 Chn. : Yes Madam.
 71 Tr. : At Roman Hill
 72 Chn. : Yes Madam.
 73 Tr. : Some people also have these same watches some wall
 clocks when they are in their room. They will, some of them will be eh,
 striking, you hear the noise, one, two, three. It means it is what? Three
 o'clock. When you hear 'kain' for one time it means it is what?
 74 Chn. : One o'clock.
 75 Tr. : That noise that it makes is called strike. It strikes bell.
 And pocket watches. We have some watches which are put into the
 pocket. You don't hold, you don't put it on the wrist but rather we put
 it in our pockets. And when you want to know the time, then you take
 it out from the pocket before you can look on it for the time. Okay,
 let's form sentences from these words. Who will help us with a
 sentence? With, with strike. A sentence with strike. Aha. The watch
 did what? I have a watch which strike bell. We have that type of watch
 and two, we have pocket watches. my father has a pocket watch.
 76 Chn. : [Talking together]
 77 Tr. : The last one tick tack tick tack
 78 Chn. : Tick tack
 79 Tr. : When you hear that the watch is making the noise tick
 tack, it means it is working. Anytime you hear tick tack, tick tack from
 a watch, it means it is working. So a watch, some watches eh, not all
 watches can make the noise tick tack., but a watch that has the tick
 tack noise. When you hear it means it is working.

80 Int. : What word is this? [The voice of the teacher next class]
81 Tr. : Okay, you are going to, you all are going to read after
me. I have a watch. Say
82 Chn. : I have a watch
83 Tr. : Which strike bell.
84 Chn. : Which strike bell.
85 Tr. : I have a watch which strike bell.
86 Chn. : I have a watch which strike bell.
87 Tr. : Number two, My father has a pocket watch.
89 Chn. : My father has a pocket watch.
90 Tr. : Number three, The tick tack is the sound.
91 Chn. : The tick tack is the sound
92 Tr. : Made by some watches.
93 Chn. : Made by some watches.
94 Tr. : To say that they are working.
95 Chn. : To say that they are working.
96 Tr. : Working
97 Chn. : Working
98 Tr. : Okay let's spell these words. Strike, /s-t-r-i-k-e/ strike.
99 Chn. : Strike, /s-t-r-i-k-e/ strike.
100 Tr. : Pocket watches
101 Chn. : Pocket watches
102 Tr. : P
103 Chn. : Pocket /P-o-c-k-e-t/ Pocket. Watches, /w-a-t-c-h-e-s/
watches. Pocket.
104 Tr. : Pocket watches
105 Chn. : Pocket watches
106 Tr. : Tick tack
107 Chn. : Tick tack, /t-i-c-k/ tick, tack, /t-o-c-k/ tack.
108 Tr. : Okay let's start reading. Unit nine. I am going to read
to you. Clocks and Watches
109 Chn. : Clocks and Watches
110 Tr. : Don't say it I am going to read to you so don't read
after me.
A very long time ago, there were no clocks or watches. People looked
at the sun to tell the time. They also looked at their shadowson the
ground. Sometimes they listened to the cries of some birds and animals
to tell the time. Later they made clocks and watches from wood.
Today clocks and watches are made of metal because metal is harder
than wood. There are different kinds of clocks and watches. Some
clocks strike bells to tell the time. We hear, we can hear the bells of
very big clocks far away. They have wall, we have wall clocks and
table clocks. Okay who can read the first paragraph? Somebody to
read if you can. If you want to read raise up your hand. Yes Fuseina.
111 Chn. : Clocks and Watches. A very long time ago, there were
no clocks or watches. People lack
112 Tr. : People looked

- 113 Fuseina: People looked at the sun to tell the time. They also
looked at their shepherd
- 114 Tr. : Shadows
- 115 Fuseina.: Shadows and the
- 116 Tr. : On the
- 117 Fuseina: On the
- 118 Tr. : Take time
- 119 Fuseina: They also looked at their shadowson the ground.
Sometimes they listened to the help
- 120 Tr. : Cry
- 121 Fuseina: Cry the
- 122 Tr. : Cry of
- 123 Fuseina : Cry of some
- 124 Tr. : Cry of some birds
- 125 Fuseina.: Cry of some birds and animals to tell the time. Letter
they
- 126 Tr. : Later
- 127 Fuseina: Later they made clocks and watches from wood. Today
clocks and watches are made from
- 128 Tr. : of
- 129 Fuseina: of
- 130 Tr+Fu : metal
- 131 Fuseina: because metal is very
- 132 Tr. : Harder
- 133 Fuseina: Harder than wood.
- 134 Tr. : Okay go to your sitting places. You are going to
answer two questions
- 135 Chn : [Talking together]
- 136 Tr. : Bring all your books [addressed to the cupboard boy]
- 137 Chn. : [Talking together]
- 138 Tr. : [Writes questions on the board]. Have you given their
books to them? Ntwere yei yidee, ebe ye dwei
- 139 Chd : Madam wɔm εko
- 140 Tr. : Okay stop work. Number one, when they were no
watches people tell the time by (a) looking at the sun (b) calling the
bird. Number two, the first clock was made of (a)metal, (b) wood.
Only the answer. You have two minutes. Aden, eden asem a? Wɔm
εko? Who has finished? You have a minute more to finish. Don't write
the question. You just write down the answer. Eh, Ernest is this /t/ or
/l/ ? What is this? Tell me. What is this? I mean what is the name? This
thing, how do you call it? It is /f/. Say it is /f/
- 141 Ernest. : /f/
- 142 Tr. : He has been cancelling /f/. Stop work. Bring your
books. go out for break
- 143 Chn. : Thank you madam.

APPENDIX 5 (16) TE: Science

SCHOOL : MAKARANTA BORƆFO
 CLASS : P4
 TEACHER : "TE"
 SUBJECT : ELEMENTARY SCIENCE
 TOPIC : KEEPING HEALTHY-COOKING
 DATE : 28TH FEBRUARY, 1996

- 1 Tr.: We learnt eating habits in Life skills. We are going to relate that to our topic today. I told you that when you get fruits you have to wash it before you eat. what will you do when you get food to eat? What will you do? Yes Boamah. Aha, what I am saying is this. In the morning when you came to school you went to the canteen to buy food. When you were going to eat the food from the bowl, what did you do first before eating? Yes.
- 2 Chn. : I washing my hand.
- 3 Tr. : I washed my hands. All of you.
- 4 Chn. : I washed my hands
- 5 Tr. : Before you eat you have to wash your hands to eat. Don't eat with dirty hands. If you eat with dirty hands what will happen? What will you get? When you eat with your dirty hands? As my hands are dirty now, what will happen to the body? Mhum Samuel.
- 6 Samuel: **Wo esi be prɔ.**
- 7 Chn. : [Laughing]
- 8 Tr. : Boamah.
- 9 Chn. : **Wo be didi deɛ a wo hohoro**
- 10 Tr. : When we eat with dirty hands we get germs. We get germs in the body. And if germs enter our body what will happen to the body?
- 11 Chn. : [No response]
- 12 Tr. : ɛh when germs enter our body we get disease. You get sick. So we must not eat with dirty hands. And we have to eat three times in a day. What is the first meal of the day? Fuseina.
- 13 Fuseina: Breakfast.
- 14 Tr. : The last meal of the day. Asantewaa
- 15 Asantewaa: Supper.
- 16 Tr. : Clap for them.
- 17 Chn. : [Clapping].
- 18 Tr. : Okay today our topic is cooking. So we are going to treat cooking. Why do you cook before we eat? **Adɛn nti na yɛ noa aduane ansa na yɛdie?** Yes.
- 19 Chd. : **Wo di a, wo yɛ funu be yɛ wo ya**
- 20 Chd : **Wo ano mu be yɛ wo hene.**
- 21 Tr. : Agyeiwaa
- 22 Agyeiwaa: **Wo be yare.**
- 23 Tr. : Asantewaa

- 24 Asantewaa: **Sɛ wo anoa wo ntumi ndi**
 25 Tr. : Oppong
 26 Oppong: **Wo yɛm bɛ yɛ wo ya.**
 27 Tr. : Okay, number one, for instance when you have fish or meat, eh, the animal may be sick before we kill it and if you do not cook it, the disease that the animal was having will transfer to you, or, eh, when eh, the animal was killed. when he, it was killed it is eh, market people will put it on their table. They don't cover it. They just put on the table, they don't cover it and flies from the toilet, from dust will come and sit on it. The flies will leave germs on the meat. So any time you get it you have to cook it before you eat. Cooking have, we have different methods of cooking. You can either roast. You can just eh put the food on fire for it to cook. We call it roast. Roast all of you.
- 28 Chn. : Roast.
 29 Tr. : Roast.
 30 Chn. : Roast.
 31 Tr. : So roast it. You can peel your either your cocoyam or plantain. Then you put it on the fire. Then fore sometime you turn it then another time you turn it the other time. within some few minutes you see that it is cooked. So we have different methods of cooking. Another method that we usually use in our homes is boiling method. Boiling, boiling is when you peel your yam, you cut it in small sizes. Then you put them in a very fine saucepan. Then you add a little water and salt to it. You cover it with a lid. Then you put it on fire to boil. That is the boiling method. So let's continue while we cook. Okay, certain food when you cook they become very attractive. They look very nice. Some food look very nice when they are cooked. Give me an example of such food.. You know some of the food. Eh, of instance, cake. When you see cake is it not nice or you don't know cake? Do you all
- 32 Chd. : **Agyeiee!** [a child screams]
 33 Tr. : know it
 34 Chn. : [laughing]
 35 Tr. : Do you all know cake?
 36 Chn : No
 37 Tr. : When you go to Kumasi and say you want to buy some cake. You. They are brown in colour. Very beautiful. When it was not cooked it wasn't nice so cooking make it very nice or to look colourful.
 [Writes on the bb].
 This means the food looks very beautiful when you cook it and at the same time the colour that you have before the cooking will also change. When you cook kontomire, what colour will you get?
- 38 Chd. : You get green.
 39 Tr. : Green for cooked kontomire and when you cook plantain too what colour will you have? Owusu.
 40 Owusu: Yellow.

41 Tr. : So what you are saying is true. It looks colourful and attractive, attractive you will like to take the food, because of how it is prepared. But when you see our plantain just lying here, you won't like to eat it, because it is nothing like eating the raw one. Again cook food is easy to manage. If you have your food which is well cooked you can even chew it. You won't find it difficult to chew. And again it will make easy digestion. So cooked food gives you easy digestion. Digestion means when you take in the food, it starts from the mouth. You chew it and it breaks down into very small particles, very very small then we swallow it. After that it goes to the stomach. Then the lungs or we have lungs which this is in Twi we call it *ensonono*. This will break down the food particles that you have taken. The good part that the body wants will be kept in the body. It will change into energy some of the food that we taken part will change at eh, fat and oil and the protein part also will help us to grow. That same food that you eat, it is going to do some work in our body. So what we do is to cook our food well before we eat so that it can digest in our body. The unwanted ones. The part which the body do not want goes to toilet and it is dispose off. Who has a question to ask? You can either ask in Twi or English. If you don't understand anything ask.

42 Chn. : [No response]

43 Tr. : Okay, if you all understand then I have to continue. We have advantages. This is the good parts. It is good for us but there some parts which are not good for us. The cooking is also going to do some harm. If you are cooking and you don't take time and you leave it and you go and stand somewhere and chart, all what you will see is that the food is over cooked. If it is over cooked, it means you are not going to get anything from the food that you cooked. For instance you are cooking vegetables and you allow it to cook for a very long time, what you are going to get is this. All the green colour that was in the Kontomire will go to the water that you used in cooking the kontomire. After that some of us pour the water away. It means you have loss some of the nutrients in the food. Nutrients means the good part of the food that you eat. for instance if you eat kontomire you are going to get vitamins. As for vitamins I know you have heard of it. In the evening your mother will tell you Akua go to the drug store and buy me vit eh! 'B'co'. Haven't you been buying them 'B'co' and multivite. Don't you buy them for your parents? From the store, Hein? You get this same B'co, it is vitamin B complex. We have all these things in our food. When you take a little kontomire, a little eh, fruits, you are going to get eh, these vitamins from our fruits and our vegetables that you eat. Either cabbages or lettuce. Yes as for lettuce I have seen you buying them from the woman who sell rice. You call them, eh, how do you call them? Salad or is it not the name you give to it? You call it salad. The woman will cut it into small sizes, then she adds a little onion and a little salt plus tomatoes. When you buy your rice you buy it too. Then you add it and beans. Then you eat. You get

vitamins in what you have eaten. So when we are cooking we have to combine different food items so that we get the good that the body requires. The body needs some food but it doesn't need some food. For instance you go and buy abankye kakulo. So what I want to tell you is that don't over cook your food. The starchy foods, plantain, cocoyam and what, what else do we have? You put down some of the things that I mentioned. Continue, yes Boamah.

- 44 Boamah: Cassava
 45 Tr.: Aha what else?
 46 Chd.: Plantain.
 47 Tr.: Aha Nkwantabisa.
 48 Nkwantabisa: Yam.
 49 Tr.: Mhum Kwarteng.
 50 Kwarteng: Cocoyam.
 51 Tr.: Mhum
 52 Chn.: Garden eggs
 53 Tr.: Garden eggs belongs to vegetables.
 54 Chn.: [Laughter].
 55 Tr.: Why are you laughing? Okay, so when we are mentioning starchy foods, don't mention vegetables. Garden eggs is a vegetable. So starchy food, those that we get from the ground. When you are cooking them wash them nicely before cooking. This is to get rid of the germs. You know that you picked it from the ground with the dirt in it. You to, on it, not in it. On it. So you have to wash it before you peel it and after peeling you wash it again so that the stones that will come to the food will get out. Any question?
- 56 Chn.: No Madam.
 57 Tr.: Yes I am going to ask you questions if you don't have questions to ask. Why do you eat at all? Say it either in Twi or in English. **ɛdɛn nti na yɛ didie**
- 58 Chn.: **Yɛpɛ sɛ yɛ nya ahɔnden**
 59 Tr.: For good health
 60 Chd.: Madam, **yɛpɛ sɛ** [inaudible]
 61 Tr.: To prevent ourselves from disease. Mhum.
 62 Chd.: **Yɛpɛ sɛ yɛ nya apomuden**
 63 Tr.: **ɛnno nti na yɛ didi. ɛnno nti na yɛ noa aduane yi.**
Aduane nso yɛ noa wei a yɛ di. ɛnno nti na yɛ yɛdɛn? We want to get good health and grow well. So if you want to grow you have to cook good food because good health depends on good food. If you don't eat good food you won't get good health. **Yɛpɛ sɛ yɛ nya ahɔnden deɛ a, ɛhia sɛ yɛ di aduane a ɛbɛ boa yɛn ama ya nya mpomuden. Yɛ andi aduane pa yɛn nya ahɔnden.** Okay who has a question?
- 64 Chn.: No question.
 65 Tr.: Then if you have no question to ask then we have to put something down. You have to write two questions into our, our

- exercise books. We are going to answer two questions into our exercise books. (Writes questions on the bb).
- 66 Chn : [Noise invades the class as pupils from classes one to three are now on break]
- 67 Tr. : Again I was telling you that there are certain things which are not good in cooked food. Eh, The food that we have finished cooking. when it gets eh, when you cook food and it gets cold. For instance when you come to school in the morning your mother prepare fufu and she left some for you. By the time that you close from school and you go to your house, what will you see that the food has be? I am saying that if you go home and your mother has prepared **either ampesi or fufu** and leave some for you, how will it look like when you go home. **Yε noa fufu anaa ampesi na yε gya wo bi a, sɛn na wo bε kɔ fie na ayε?**
- 68 Chd. : **Na nwansena asisi so**
- 69 Chd. : [Inaudible]
- 70 Tr. : **Sε mo ahunu aduane a ya noa na adwo. Yε noa aduane na εdow nso a εnye akɔno.** Cold food are not attractive and some of them become, eh, becomes very hard. **εbi so bε yε dendenden.** So it becomes very hard. [Writes on the bb]
- 71 Chn. : [Talk together and also take care of their food on fire. The food attracts other children from the junior classes who are on break. There is too much noise]
- 72 Tr. : **Adɛn yε di dwa wɔ dan mu ha? Mo nka mo ho εfiri dan mu ha nom nkɔ. Hε, Joahim wo nbu adeε, wahuu? Na hε**
- 73 Chn : [Talking together and taking care of their food on fire].
- 74 Tr. : **Eei Kojo! εnne dεε wo ansusu.** Okay look on the board. Number one, Food is cooked to make it easy to (boil, digest). Number two, We cook food to make it (attractive, simple to eat). Number three, Food becomes hard when it gets (cold, cooked). Number four, Cooking (plant germs, kill germs). Start work.
- 75 Chn. : [Working]
- 76 Tr. : You have ten minutes to finish the work.

APPENDIX 5 (17) TE: Mathematics

SCHOOL : MAKARANTA BORBOFO
CLASS : P4
TEACHER : "TE"
SUBJECT : MATHEMATICS
TOPIC : SOLVING FOR THE UNKNOWN
DATE : 28TH FEBRUARY, 1996

- 1 Tr. : Yesterday we were learning something about the operation machine, how it operates. I dr., I drew the machine. I gave you some numbers and told you that where two numbers like this three and four, the answer. When you treat the machine with three or four, the answer that came out of the machine, the number that dropped out. The number that came down here was twelve. So I told you that when you do something of this nature it means that something had happened to these two numbers, that is why you have got this answer. So what is the operation that we are using here? What was done to three and four to get twelve? I am explaining again. I am saying when you are given two numbers like three and four and you put it into our machine and wind it we shall see that the two numbers the two numbers that you put into the machine, three and four will not come out as three and four but it will come out as a different number and the number that came out of the machine was twelve. What was the operation that they were using here? Aha Boamah. I am coming nearer to you.
- 2 Boamah: Division
- 3 Tr. : Who else?
- 4 Chd : Multiplication
- 5 Tr. : Somebody says multiplication and another one says division. Boamah do you want me to take, do you want to tell me that if you divide four by three or three by four you are going to have what? Will you get what? When you divide three by four. Yes.
- 6 Chd. : [Inaudible]
- 7 Tr. : Listen to me. I am saying if you have three and you divide it by four people. For instance you have four oranges and you divide it among the three people are you going to get twelve. Yes
- 8 Chd. : Obia be nya one
- 9 Tr. : Aha
- 10 Chn : No madam.
- 11 Tr. : So if you divide three by four you won't get twelve. So he is multiplying. The operation that he is using here is multiplication. He is not dividing. Okay, another example. These same three and four. Both three and four were put into the same machine and seven came out of the machine. What is the operation that the machine is using? Yes Fuseina.
- 12 Chn. : Addition

- 13 Tr. : Thank you. Clap for her.
- 14 Chn. : [Clapping]
- 15 Tr. : Okay, today too we are going to continue our work on operations. We are going to find the number that makes the sentence true again. We have been given three and four, three and four in a bracket. Now we are not using the machine again. We are not going to draw the operation machine, but it says, the three and four, a sign has been given here. It means three times four, three times four. So when you are given something of this nature, what you have to do is, here, he did not write anything here. So you have to bring three and four, three times four here three times four is what? Count, count. You are going to count so you count three for four times
- 16 Chn : [Counting their counters].
- 17 Tr. : Amofa.
- 18 Amofa: Twelve.
- 19 Tr. : Amofa says twelve, who else.
- 20 Chd. : Twelve
- 21 Tr. : If you know the answer raise up your hand and if you are called then you tell us the answer. Yes Daniel.
- 22 Daniel : Thirteen.
- 23 Tr. : Somebody says he's having thirteen. Who has another different answer? Yes Agyeiwaa
- 24 Agyeiwaa: Twelve
- 25 Tr. : Okay, who has a different answer? What answer do you have?
- 26 Chd. : Twelve
- 27 Tr. : Okay if he says thirteen and some of you are saying it is twelve. Let's find out whether the twelve or the thirteen is correct. Okay, help me to count three, four times.
- 28 Tr+Chn: One, two, three, four, eei! One, two, three; One, two, three; One, two, three..
- 29 Tr. : I have put them together
- 30 Chn : One
- 31 Tr. : Let's
- 32 Tr+Chn: One, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve.
- 33 Tr. : Ernest do you agree with us that when you count three four times you will get twelve? Do you agree?
- 34 Ernest : Yes madam.
- 35 Tr. : Okay, so when you multiply three by four you are going to get twelve. Eh, wei, Nti, Owusu stop what you are doing. Here it is in brackets. He has brought N here because the number is not known. He says eh, three times four then you get the answer here. You bring the twelve here, plus, this is the operation that you are using in addition to the N equals to seven. This is a mathematical sentence: $(12 + N = 17)$ twelve plus N equals to seventeen. He says when he adds a certain number to *ayi*, a certain number to twelve, you are going to get

- seventeen. What number will you add to twelve just to give you seventeen? Duodo.
- 36 Duodo : Five
- 37 Tr. : Who else.
- 38 Chd : Five
- 39 Tr. : Who has a different answer? Eh, if you have five don't raise up your hand. Okay, it means twelve plus five equals to seventeen. ($12 + 5 = 17$). So N is what? What is N? What number have you replaced with N?
- 40 Chd. : Five
- 41 Tr. : Clap for him.
- 42 Chn. : [Clapping].
- 43 Tr. : Today Nkwantabisa is trying. (laughs) N is five because you put five here. N is here. N should have been here and if it is out it means N is five. Any question?
- 44 Chn : No madam.
- 45 Tr. : Another example. [writes on the black board]. Mhum, you have been given ($10 - 6$)ten minus six, and when these two numbers, when these two numbers minus two, will give us N. $\{(10 - 6) - 2\} = N$. So you subtract ten, six from ten. The answer that you get down here minus two will give you N. What is the number?
- 46 Chn : Bid for opportunity to answer by a show of hands.
- 47 Tr. : No you have to work first. You don't have to give the answer. Okay it becomes ten minus six($10 - 6$). Okay take out your counters. Count ten.
- 48 Chn. : Counting their counters
- 49 Chd. : One, two, three, four, five, six, seven, eight, nine, ten.
- 50 Tr. : Take six out of the ten. Take six out of the ten
- 51 Chd. : One, two, three, four, five, six.
- 52 Tr. : What is the remaining.
- 53 Chd : Four.
- 54 Tr. : When you take six out of ten you are going to get
- 55 Chn. : Four.
- 56 Tr. : So here, the answer four is here. So when you get this four you haven't finished. You have to bring this sign over here to this place because of the operation. She didn't bring it just here. The operation is outside the bracket. Then you bring the subtraction sign here. Then you bring the two down. Then you bring the equal sign and the N that you are to find. Okay count four.
- 57 Chn. : One, two, three, four.
- 58 Tr. : Now what number are you going to take out of the four? Fuseina.
- 59 Fuseina: Two
- 60 Tr. : Okay, take two from the four.
- 61 Chn : One, two.
- 62 Tr. : Nkwantabisa your hand is up
- 63 Nkwantabisa: Two

- 64 Tr. : Thank you. So N is what?
- 65 Chn. : Two.
- 66 Tr. : This is all what we are told to do. Who don't understand? If you don't understand ask any question. **Se obi nti biribi ase a wo nia no nbisa me.** This means you all understand.
- 67 Chn. : Yes madam
- 68 Tr. : Okay, give out. Give them their books. [Writes on the board]
- 69 Chn. : Some children distribute pupils exercise books. The rest of the class Talk together.
- 70 Tr. : Have you all got your books?
- 71 Chn. : Talk together.
- 72 Tr. : Have you all got your books?
- 73 Chn. : Yes madam
- 74 Tr. : Kwabena Owusu where is your book?
- 75 Owusu: [Inaudible].
- 76 Tr. : Number one. One, six and two, the operation is subtraction into another brackets. These two numbers they are dropping down. They are coming down into here. When they came here you got ten. We have ten here. So these two numbers when they come down what number will be here? Again we have six and two and they are put into the machine. They are coming down here. So this is the place that they should be. We have already given ten here. So the number that you get from eh, six and two when you subtract them, you put it here. The operation is subtraction. Then what you are to find is P to make the sentence true. You are to find P. Number two. Eight and two. The operation is division. You have put the eight and two into the machine and it is dropping. It, ...the answer that you get, you put it here. And you have two in the same bracket. Then after that the operation that you are going to use in this second operation is division. So there is division up and division up. You can get another one which is what? Division and multiplication. Here you have division up and down. So what you are to find is P. Start work. You have five minutes to finish the work.
- 77 Chn. : [Working].
- 78 Tr. : [Goes round]. Write down today's date here. Leave two lines between the last work that you did. Write today's date here. Eh, some people don't leave lines between the old work that they have done. Agyeiwaa where is the topic? Write the topic. Write down the topic. Fuseina. Where is the topic?
- 79 Chd. : [Points]
- 80 Tr. : No. The topic is operation. Where is the number that makes the sentence true is not the topic. But it is not..... you want to do. What you are finding is what you have put down. Then it is the activity that you are doing. February is not double 'B'. Cancel one 'B'. Where is the date? Put down today's date here. Then operation. Operation here. Then you write here, eh, Find the number that makes

the sentence true before you start the day's work. Don't write the date and the topic on the same line. Okay? Bring your comma here. Where is Dodoo?

81 Chd : W▷k▷ abonten.

82 Tr. : You are very slow. Be quick. Use your counters. Use them in counting. Mhum, what have you counted? Put what you have count, put it here. What is this? A!

83 Chd. : 'P'

84 Tr. : So is this 'P'? [Goes to the board, writes down "q" and says] He's writing this for 'P'. Look at it. The stomach is facing, this way, Kumasi and Adibinsu. [laughs]. Listen here, here we are doing subtraction. Some pupil are doing addition. After they have counted six, then they count two again. No, you don't do it in that way. after counting six then you take two out of the six. You take two out of the six and not two from the other one you did not count. Let me see what you are doing. Open your book. Mm, you haven't done anything. BB why is it that you haven't started writing? Hay! You should be very careful. Do it quickly. Stop work. What you have to do is this. When you count six first and you take two from the six. The number that you get here is the number that you are going to write down here. Some pupils don't know what they are doing. Write the answer that you get here. Here. You bring it down here. And this operation that you are using here is subtraction and not addition. Continue. You have two minutes to finish. No don't lye on the book. Sit upright. Get up. When you get to this number, subtract it. Subtract this from this. Subtract this from this. The answer that you get, then you put down here. Do you understand what I am saying?

85 Chn. : [Nods]

86 Tr. : One minute more. get ready to stop work. Stop work. Pass your books forward. Pass it. give it to your friend.

APPENDIX 5 (18) TE: Ghanaian Language

SCHOOL : MAKARANTA BORƆFO
 CLASS : P4
 TEACHER : "TE"
 SUBJECT : GHANAIAN LANGUAGE
 TOPIC : Twi KASA MMRA- KASAKOA ɛNNE ABɛ BUO
 DATE : 28TH FEBRUARY, 1996

- 1 Tr. : Yɛ sua biribi fa Ghanafo ɔ ho sɛ yɛ nyinaa yɛ nipaa baako. Nanso onipa biara ne ne kasaa. ɛnipa bɛn ɛnno mu na me ka, me kyerekyerɛ mo bɛbia wɔ ɛmo tɛ? Nipa bɛn na mo de to mutiri mu?
- 2 Chd. : Tikya, tikya.
- 3 Chd. : Konkomba.
- 4 Tr. : Mo.
- 5 Chd. : Dagomba.
- 6 Tr. : Mhum!
- 7 Chd. : Ewe
- 8 Tr. : Mhum!
- 9 Chd. : Bono!
- 10 Tr. : Mhum, me kase wɔm no moa wɔ no mon ɛka Twi , Twi no, wɔm nom nyinaa yɛ wɔ din baako ɛde ma wɔm nom. ɛɛn din ɛna yɛde ma saa nnipa wɔ no?
- 11 Chn. : **Tikya, madam** [Talking together].
- 12 Tr. : Mese sɛ wo nim biribi a pagya wo nsa, na me frɛ wo a na wo aka
- 13 Chd. : Akan
- 14 Tr. : Mmo nyinaa mo mmɔ nsam ɛma no.
- 15 Chn. : [Clapping].
- 16 Tr. : Wa yɛ adeɛ. ɛnti ɛde nso. Yɛ ayi a yɛba abɛ yɛ no . Yɛbɛ ka ɛɛ, kasakoa ɛnne abɛbuo ɛho asem. Nti yeyɛ kasakoa ɛnne abɛbuo
- 17 Chn. : Kasakoa ɛnne abɛbuo.
- 18 Tr. : Mmo ne mo nsem hu
- 19 Chn. : [Talking together].
- 20 Tr. : Me kase kasakoa yi, obi nso ayɛ naso sei hey. Wo nim ade korɔ a ɛkyerɛ. Me bɛ kyerekyerɛ mu. Obia bɛ te aseɛ sɛ ɛdin no na ɛso, na ɛmom ɛdwuma no a ɛyɛdɛ ɛswa. Obia nim ade koro a ɛyɛ. ɛbiribi wɔhɔ a, na obi theɔ na yen pɛ sɛ wɔte asem a yɛ ka. ɛnti sɛ mbɛ kase ɛɛ, abɔfra no akɔ tiefi.
- 21 Chn. : [Talking together].
- 22 Tr. : Wahunu sɛ meka biribi te sei a ɛnye dɛ. Wahunu sɛ obia ahunu ade korɔ a me pɛ sɛ me ka no?
- 23 Chn. : **Yes Madam.**

- 24 Tr. : enso ekyere se ma ano ate. Se woka asem, na wo kaa ye na obia ewɔhɔ bia enim. Akwada ketewaa kora enim aseɛ a, enno ekyere se wano ate. Na emom se wotimi ka, na wode ebe efra mu, na wode kasakoa no bi efra mua, na ekyere se obi wɔhɔ a na wate se o onipa asimesi na ano ate. Na ano ate kora no, ɛɛ, mre bi wɔhɔ a yenka no saa **plain**. Yese na ano awo. efie mote se mo maame no mo ka biribi saa?
- 25 Chn : **Yes madam**
- 26 Tr. : enti akwadaa no akɔ tiefi yen pe se ye ka no saa, deɛ yebe ka e se aboɔfra no agye ne nan.
- 27 Chn : [Laughing].
- 28 Tr. : enti ye nyinaa yeka
- 29 Chn. : Aboɔfra no agye ne nan.
- 30 Tr. : ebio
- 31 Chn : Aboɔfra no agye ne nan.
- 32 Tr. : Mhum, se ye ka biribi te sei a, ekyere se ya ka kasakoa. Ye anka no tii, ama akwadaa no ankasa a wɔ ye naa deɛ no ahu ade koro a wa ye. Nti ye kase kasakoa a, ma huu se obi de ne nsa egyede se ya kwa no sei. enye, ye aka na ya kwa no sei. Dabi na emom, asem a ye ka no, ye anka no tii ama obia anhu deɛ ye pe se ye ka no. Na emom yede biribi a hinta. Abebu. ebe, ekwan ne bi wɔhɔ a anka yebe ka no bɔkɔ a obia bete aseɛ. enam se yepe se ye te Asante kasa no yiye. Twi kasa yete aseɛ. Ye kasa yeka ema no yede. enno nti ena ye bu be. Na maame bi wɔhɔ a, ma me fa nfa tuhu wei ebra. Maame no kɔ afuom a, wɔ hunu se obi borɔdeɛ wɔ hɔ a, na wakɔ akɔ twa. Na wa awo ne ba, ne ba no so ba sukuu mu ha, na se tikya de ne sika to ne bag mua, na wɔ no nso ayi. enti deɛ ye taa ka fa saa adeɛ noa wɔ ye no ne se, 'ɔkɔtɔ nwo annoma'
- 33 Chn : [Talking together].
- 34 Tr. : Ye nyinaa yen ka ɔkɔtɔ nwo annoma
- 35 Chn. : ɔkɔtɔ nwo annoma.
- 36 Tr. : ɛɛ. Na deɛ yepe se ye ka ne se, enye ɔktɔ. mo gyede se ɔkɔtɔ wɔ betumi awo annoma?
- 37 Chd : **No madam.**
- 38 Tr. : Aden nti na ɔkɔtɔ enwo annoma? Mo nkyerɔkyere mu wɔ se deɛ yesi hunu nono. Ade koro a ɔkɔtɔ no, biribi wei mo kyere mo a, mo nkyerekyere mu sedee ɔkɔtɔ tee enne deɛ annoma tee enneekwan nea wɔbe fa so awo no. ehein?
- 39 Chd. : ɔkɔtɔ da ebɔn mu.
- 40 Tr. : Kyerekyere mu bio. Tuaso
- 41 Chd. : ɔkɔtɔ da ebɔn mu. enno nti wɔ ntumi enwo annoma
- 42 Tr. : Mhum, mo.
- 43 Chd : ɔkɔtɔ da ebɔn mu, wɔ no nso si dua so
- 44 Tr. : Mhum, Nkwantabisa
- 45 Chn : ɔkɔtɔ nni ataban, annoma nso ewɔ ataban

- 46 Tr. : Mo, Hwan bio na wɔ sane wɔ asem foforɔ eka? Obia enne bie?
- 47 Chn. : [No response].
- 48 Tr. : eyɛ nokware, ɔkɔtɔ wɔte ne ebɔn mu. Annoma te dua so. Wɔ tu kɔ. ɔkɔtɔ wiyawiya fam. ebe ye den na watumi akɔ wo annoma? Wɔ wo noa enye yiye. enti obiara dee wɔ ye no, ennoa bi enna wɔwo ne ba nso a wɔye. Nti wo suban a wode te mu no, eso enna wɔhwe aye bie. Nti ɔkɔtɔ be wo ɔkɔtɔ, annoma be wo annoma. enti obi kase ɔkɔtɔ nwo annoma a, ne kyere a ne se wo suban a we wo mu no, eso a na wo mma a wobe we yen wɔn so be fa. Se suban no bi enna wɔm nyinaa ye gyina mu. ewɔ mu se we nye korɔmfɔɔ ɔnso wobe tumi akɔ wo ɔkorɔmfɔɔ. Ne tia etwa mu ne se, bia na akwada no wode neho kɔ bɔ
- 49 Tr+Chn.: Akorɔmfɔɔ.
- 50 Tr. : Ahaa enoara ntira. Nti yebe pe nhwesɔ ebi aka ho. Me mabu ebe enna mama kasakoa nso nhwesɔ. Nti mo nsoso mbe pe se obi be boa yen ewɔ kasakoa nhwesɔ no bi.
- 51 Chd. : [Talking together].
- 52 Tr. : Samuel.
- 53 Samuel: Se obi wɔhɔ a se wɔ kasa a na wa sane ede akɔfa bebi foforɔ
- 54 Tr. : Mhum, nhwesɔ. obi wɔhɔ a ne ho wɔ fe paa. O ababawa, ababawa wei d3e neho wɔ fe. Yeka a, obi ba gyina hɔ a, me, me nka se woho wɔ fe ma wo tiri mu aye wo de. Dee me beka ne se wei dee wɔ ye osowa.
- 55 Chd. : Wei dee wɔ ye osowa.
- 56 Tr. : Osowa mo nyinaa.
- 57 Chn. : Osowa
- 58 Tr. : Asee ne se ababawa fefee fe.
- 59 Chn. : [Talking together].
- 60 Tr. : Nti ababawa ne ho wɔ fe enna yefre no se
- 61 Chn. : Osowa
- 62 Tr. : Nneema pii wɔhɔ a, ye wɔ fie a ye maame no mo ka a, eyɛ kasakoa. Nti mo nhwehwe, mo nkaekae mo tiri mu nsem a eyɛ a wɔm ka no. Na yen fa bi na ye nso ntoto yede. Wo ye a, wo ka ye, na ye, ye. Akwadaa bi wɔ te fie a opanin eka asem a, na wagye. Wobe hunu na wa ye ne ho npanin nsem. Kasa ben na eyɛ a, ye, yede ka ma no? biribia wobe hu, wɔ ye a, wɔ nye no se dee akwadaa ye no. wɔ ye no npanin mu.
- 63 Chd. : Yebe kase npaninfoɔ eka asem a na wo ano da mu.
- 64 Tr. : Samuel.
- 65 Samuel. : Wo ye npanin nsem.
- 66 Tr. : Yeka saa. Obi wɔhɔ a yen mpe se, wo kase wo ye npanin nsem. Nso wɔbe ka asem bi a ekyere se wo ye npanin nsem.

- ɛfiri sɛ yɛ ka sɛ wo yɛ npanin nsem prɛko saa kyere woa na aye wo ya.
enti ade korɔ noa wo yɛ no, ɔhɔ a na wa gyae. Boamah
- 67 Boamah : Yɛ kase wo yɛ nyiyi ano.
- 68 Tr. : Nkwantabisa
- 69 Nkwantabisa: Yɛbɛ kase wo aseɛ.
- 70 Tr. : Aha yɛbɛ kase wafi. Eei akwadaa yei wafi! Yaa, yɛ nka
saa nkyere mo?
- 71 Chn. : **Yes madam.**
- 72 Tr. : Wo yire woho na wo yɛ biribi, asem bi wɔhɔ a, anka
ɛnye sɛ wo na wo ka, na wagye na wa ka. enna me, enna me.
- 73 Chn. : (Laughing).
- 74 Tr. : Hwan na wɔ yɔ saa wɔ fie?
- 75 Chd. : [Laughing].
- 76 Tr. : Saa adeɛ wɔ no yɛn nka nkyere mo wɔ fie?
- 77 Chn. : Yes madam.
- 78 Tr. : Sɛ wɔ ka a, panin bi gyina hɔ a Wɔn pɛ sɛ wɔ ka ma
ne yɛ wo ya. ɛfiri sɛ wobɛ kase wa didi matɛm. Wɔ kase wo yɛ npanin
nsem a, ɛbɛ yɛ wo ya. Nti wɔ nka. Asem a, wɔbɛ ka ne sɛ, akwadaa
wei deɛ wafi. Aseɛ kyere sɛ wo yɛ npanin nsem.
- 79 Chn. : Wei deɛ ya te bi.
- 80 Tr. : Yɛn nka nkyere mo?
- 81 Chn. : Yɛka kyere yɛn
- 82 Tr. : Mo so mo nka deɛ yɛ ka kyere mo no bi ma yɛ nyinaa
yɛn tie. Mhum. ɛtɔ dabia, yɛ ne yɛn npaninfoɔ wɔhɔ a, na wɔpɛ sɛ
wɔkɔ duaso, wɔ yɛ a, wɔse, wɔse wɔk dua so aba. Mo hwɛ a we
bɛ tumi aforo dua akɔ tena so?
- 83 Chd. : **No madam.**
- 84 Tr. : Saa nsem no bi na mepe sɛ mo keka kyere yɛn. Sɛ wo
ɛkɔ he ne o, wo se me kɔ dua so.
- 85 Chn. : [Laughing].
- 86 Tr. : Na aseɛ kyere sɛn?
- 87 Chd. : Wɔkɔ tiefi.
- 88 Tr. : Ahaa mo ahu kwanea a wɔfa soa wɔ ka no?
- 89 Chn. : **Yes madam.**
- 90 Tr. : ɛye ɛni die kwanso a yede kasa. Sɛ wahunu? Kasakoa
yɛ ɛnidie kwanso a yede kasa. Asem no pɔte wɔhɔ nso wobɛ hwɛ na
wode ne nam nkyɛn. Wɔ nbɔ no adi plain. Nti mo so mo maame ɛbi
yɛ?
- 91 Chn. : [No response].
- 92 Tr. : Obiara ɛne biribi ɛka?
- 93 Chn. : **No Madam.**
- 94 Tr. : Obi a, .. asem a yete fie a, yaka aka a akyere yɛ. enti mo
ɛnka?
- 95 Chd. : [A child raises hand]
- 96 Tr. : Wo wɔ biribi ka anaa?

- 97 Chd. : [Shakes head to signal no].
- 98 Tr. : Sɛ wo nsa wɔ soro?
- 99 Chd. : [No response].
- 100 Tr. : ɛɛ, ɛwɔ hɔ a, Hwan na ate sɛ ɔhene bi awuo pɛn?
- 101 Chn. : [Show of hands].
- 102 Tr. : Ahein, kuro bɛn hene na mo ate sɛɛ wa wuo? Mhum, wo pagya wo nsa na ma frɛ wo. Nkwantabisa.
- 103 Nkwantabisa: Obuasi.
- 104 Tr. : Aha sɛ wɔm kase ɔhene bi awuo a, mprɛ pii no, ɔhene wuo a, yɛde sie kakra. Yɛn nprɛ sɛ, wo ya na ya bɔ no amanɛɛ, ya na ya bɔ nkrɔfoɔ amanɛɛ. Yɛn yɛ no saa ɛwɔ hɔ. Nti ɔhene wuo a, huhuhuhu. Afei deɛ yɛ bɛ te ne sɛ, nana kɔ akura.
- 105 Chn. : Nana kɔ afuom [then talking together].
- 106 Tr. : Nana kɔ akura anaa nana kɔ na akura. Obi kase nana kɔ na kuraa a, wobɛ kase sɛn?
- 107 Chd. : Mbɛ kase wa kɔ kuro bi so. ɛhein! ɛnti wahunu sɛ ayira obiara adwene?
- 108 Chd. : **Yes madam.**
- 109 Tr. : Deɛ yɛpɛ sɛ yɛ kaa ne sɛ ɔhene no wa awuo. wa wuo. ɛnti na ɛkyerɛ sɛ nana no awuo.
- 110 Chn. : Wa awuo, wa wuo.
- 111 Tr. : Nti nana awuo a, yɛn pɛ sɛ yɛ ka. Na sɛ wote fie hɔ, nkवादaa bɔne, yɛka no sɛ nana awuo a, mo kɔ yɛaa, na mo de kɔ **preachi**.
- 112 Chd. : Anka yɛ kɔ kano abɔnten.
- 113 Tr. : Aha, ɛnno nti ɛnna ɛwɔ hɔ a, npaninfoɔ ɛdi nkoɔmɔ a, na yɛde saa kasakoa no hyehyɛ, hyehyɛ mu no. Na wote hɔ a, na wa ahunu aɛm korɔ ankɔ ka no wɔ abɔnten. Mo maame no mu koraa, yɛ ka aɛm a, yɛ ka no sie. ɛfa abebuo no so deɛ, ɛbɛ ɛbɛ ɛyɛ me sɛ ɛyɛ aa mutaa bubu bi
- 114 Chn. : **Yes madam.**
- 115 Tr. : Nti woa wobɛ bu bɛ kane pagya wo nsa. Na me bisa woa na wo aka akyerɛ yɛn. Sɛ yɛ bu bɛ no wei nso a, wobɛ sane akyerɛ aseɛ. **Yes Sarfo.**
- 116 Sarfo. : ɛyɛ, ɛgya korɔ
- 117 Tr. : Mo ntea yɛ. ɛgya korɔ nko. ɛnno yɛfrɛ no aboɔme. Mo nyinaa.
- 118 Chn. : Aboɔme, aboɔme.(followed by noise).
- 119 Tr. : Aboɔme no, Borɔfo mu nanka yɛ kano deɛ a, yɛbɛ kase **riddle, all of you.**
- 120 Chn. : **Riddles.**
- 121 Tr. : ɛyɛ baako deɛ a ɛyɛ **riddle**. ɛnna wei nso deɛ, yɛ wɔ **proverb**
- 121 Chn. : **Proverb.**

- 122 Tr. : **Proverb.** Kata wani te no nyinaa, enno na yefre no se aboᵐme
- 123 Chd. : [Laughing]
- 124 Tr. : enno nko. ebe wei sei dee, eye asem tenten. Ye kase kata wani te, wo se me hunu den. Yen nda ye a,
- 125 Chd. : Ye nso daee.
- 126 Tr. : Hwan bio?
- 127 Chd. : Borᵐfre a eye de, na aba da ase.
- 128 Chn. : Yei!
- 129 Tr. : Mmo, aha
- 130 Chd. : **Madam** wᵐse borᵐfre a, eyede na abaa da ase
- 131 Tr. : Aha.
- 132 Chd. : Ankaa a eyede na nhohowa wᵐso.
- 133 Chn. : Ankaa a eyede na
- 134 Tr. : Hwan bio?
- 135 Chd. : Borᵐfre a eyede na akyem kᵐso awia.
- 136 Tr. : Se mo ahunu se afei na mo hunu abebu. Aba Nkwantabisa.
- 137 Nkwantabisa: Aboᵐfra wope nkyene enna eye a wᵐfa nkyene burusoᵐ.
- 138 Chn. : [Prolonged laughter]***.
- 139 Tr. : Okay me nso me ka bi. ᵐkᵐᵐ ewia ne ba so ewia, hwan na ebegye bi tataa?
- 140 Chn. : Ne ba/ᵐmaame, ne ba/ ne maame, ᵐmaame.
- 141 Tr. : se mo ahunu? Me bekyere mo ase. Mo dee a mo ka ye mo be kyere ase. Obiara be kyere ne dee ase. Seesei me me yari, meba yari, hwan na wᵐkᵐ hwe obi?
- 142 Chn. : Obi nhwe obi.
- 143 Tr. : Saa na etie. Nti wo so wo dee a wobu ye kyere ase. Sarfo kyere wobe no ase.
- 144 Sarfo. : Me ntimi.
- 145 Tr. : esese ebebu wᵐhᵐ yi, abe bia wobe bu no wote ase na wo timi kyere ase, sewahu? Se obi wᵐ nte abebu no ase na se wobu a enne asem a wo ka no
- 146 Tr+Chn: ekᵐ
- 147 Tr. : Aha Sarfo
- 148 Sarfo : egya ekorᵐ.
- 149 Chn. : A hoo!
- 150 Sarfo : **I forgotten.**
- 151 Tr. : Hwan bio? Obi yeka asem a, wᵐse abiriwa wᵐpe nkyiwiye. Saa ebe no bi me npe bi. Ye ye a, mo ma yen ye, ebi no mo edi aye no se agorᵐ. enye agorᵐ na yedei. eye kwanea a yebe faso na yebe kasa ama ye kasa no eho atee. Na ye kasa a, obia ahunu se ye ano awo. Nti mo ye a mo ndwene be no ho, enna mo abuo. Hwan bio? efiri

sɛ yɛba abɛ twɛrɛ bi agu yɛ nhoma ɛmu. Me twɛrɛ a na wode nsɔso
asɔso.

- 152 Chn. : Eei! Eei! **Madam** wei deɛ.
153 Tr. : Nkwantabisa na wo nsa wɔ soro. ɛdɛn adeɛ a?
155 Chn. : [Laughing]
156 Nkwantabisa: ɛnye bɔne
157 Chn. : ɛye bɔne. (in the amidst Laughing)
158 Tr. : ɛɛ, yɛ sane aka. ɔkɔɔ didi a, ɔkɔɔ didi a..... ɛdɛn
na yɛde bɛ sɔso?
159 Chd : Wɔ nnom nsuo.
160 Chn. : [Laughing]
161 Tr. : Mo ntea yɛ
162 Chd. : [Laughing].
163 Tr. : ɔkɔɔ didi a, mede ɛhɔ ɛmuacɛ ɛbɛ hyehye ɛnimo
164 Chd. : Eei! Eei!
165 Tr. : Mm
166 Chn. : [Talking together].
167 Tr. : Writes on the board. *****
168 Chn : [Talking together while the Tr. writes on the board]
169 Tr. : Mo nyɛ kom na mo ntea. Ma mamɔ ɛdwuma mmeɛnsa.
Me pɛsɛ mo yɛ gu mo nhoma yi mu. Deɛ ɛdikan. ɔkɔɔ didia na
ɛye..... (annoma, aponkyere ne) ya. Mo bɛ yi asem no deɛ ɛnno no
ɛkorɔ na wa yi ɛdi ahyɛ enimu. Nsɛm mmeinu a me de ama mo yi ɛbia
wobɛ yi baako pɛ. ɛntwɛrɛ ne mmeinu.
170 Chn. : **Yes madam.**
171 Tr. : Deɛ ɛtɔso mmeinu. Akwadaa tete fufuo a ɔte *
ɛmuacɛ(kɛsiɛ pii, deɛ ɛbɛ kɔ na ano)
172 Chn. : [Talking together].
173 Tr. : Mmeɛnsa. Nana aka nkyene agu. ɛkyerɛ sɛ nana (nana
awuo, nana nkyene ahwie agu. Nti wo ɛtwɛrɛ asem noa, na wo ayi
muacɛ ɛfata no ahyɛ enimu.
174 Chn. : [Talking together].
175 Tr. : Mo nhyɛ aseɛ.
176 Chn : [Talking together].
177 Tr. : Twɛrɛ ɛnnɛ date. Wo wei a, asem yɛi nhɛnim ne
kasakoa ne abɛbuo anaa mbɛbuo. Nti wo wei a, na wode ahyɛ aseɛ.
ɛnoa nono.
178 Chn. : [Working]
179 Tr. : Mo ngyacɛ ntwerɛ na me nkyerɛ mo adeɛ. Obi twɛrɛ wei
a, kasakoa noa na wagya, waka ne no abɛ bɔ kasakoa no ho. Na wode
abɛbuo no nso aka ɛhɔ, aka ho bi. Nti ne nyinaa aka bomu baako. Me
npɛ no saa. Tete ntɛmu.
180 Chn. : [Talking together].
181 Tr. : Twɛrɛ date no ansa na wo atwerɛ nhyɛ nimu no.

- 182 Chd. : **Madam** hwε ma twerε ne nyinaa [amidst talking together]
- 183 Tr. : Fa wo nan fa aseε
- 184 Chn. : [Talking together].
- 185 Tr. : Ma mamο sima εnum εna mode bε yε saa adwuma yei.
- 186 Chd. : Madam [amid talking together].
- 187 Tr. : Woa wo nte biribi ase no bisa me.
- 188 Chd. : [Working and talking together].
- 189 Tr. : εhein, Sakodia wo atwerε ne nyinaa abom mu baako. Wei me nhunu. Tete ntεmu. Wo twerε akwadaa na te, na wo ate ntεmu kakra ansa na wo atwerε fufuo. Nti te yi, anka εnsεsε εbene fufuo no. Ntεmu ha, akwadaa ne fufuo no ntεmu no εnsεsε anka te yi εbene no saa. Tete ntεmu. Dee wo twerε no twerε no ha sei.
- 190 Chn. : [Working].
- 191 Tr. : Karikari wo krataa w⊃ he ne?
- 192 Karikari : Me ne bi.
- 193 Tr. : K⊃ fie k⊃ gye bi bra.
- 194 Chn. : [Working].
- 195 Tr. : Sarfo wo krataa w⊃ he ne? K⊃ fie k⊃ gye bi bra seesei a
- 196 Chn. : [Talking together].
- 197 Tr. : Opoku pi yi yε ne kesie. yεte ntεmε. Hwε me dee no. Ma anka abomu. Wei nko, wei nko.
- 198 Chd. : [Talking together].
- 199 Tr. : Bεbia nsaho no εw⊃ no, wo hunu nsaho bia w⊃h a, εnno kyere sε εye mmuaεε baako.
- 200 Chn. : [Working and talking together].
- 201 Tr. : Hwan na awei?
- 202 Chn. : [Talking together].
- 203 Tr. : Ma hunu sε εbi nom εsensen aseε. W⊃ twerε wei a na wa sani aseε. Wodeε ensane aseε. Mbε hunu wo aye
- 204 Chd. : [Working].
- 205 Tr. : Wei biribi hyε aponkyerεni no akyi. Nti fa hyε h⊃. Wo ahunu sε εbi hyε akyire h⊃? Na εye ya. Wo agyae ya wom. Nti fa ya no hyε ha.
- 206 Chd. : [Talking together].
- 207 Tr. : εbinom awei o!
- 208 Chd. : [Talking together].
- 209 Tr. : εnneε sima εnum no a me de ma mo no aso. Nti obiara εfa ne nhoma εbra. Yε awei.
- 210 Chd. : [Talking together].

APPENDIX 5 (19)TF: Ghanaian Language

SCHOOL : MAKARANTA BORBOFO
 CLASS : P5
 TEACHER : "TF"
 SUBJECT : GHANAIAN LANGUAGE (READING)
 TOPIC : MENIM
 DATE : 19TH FEBRUARY, 1996

- 1 Tr. : Yebe abe ye Twi akinkan. Na nea edinkan no, yebe sua
 nsem korenkore ya ewo akinkan no mu, ya ebe ma aye den ama yen
 se ye kan nea. Nti ye dikan abe sua enno. Menim. **All of you.**
- 2 Chn. : Menim.
- 3 Tr. : Menim. ebio!
- 4 Chn. : Menim.
- 5 Tr. : nim.
- 6 Chn. : nim.
- 7 Tr. : nim.
- 8 Chn. : nim.
- 9 Tr. : Ampesie.
- 10 Chn. : Ampesie.
- 11 Tr. : Ampesie.
- 12 Chn. : Ampesie.
- 13 Tr. : Ampesie.
- 14 Chn. : Ampesie.
- 15 Tr. : [Writes on the board].
- 16 Chn. : [Watches him as he writes].
- 17 Tr. : Ammirika.
- 18 Chn. : Ammirika.
- 19 Tr. : Ammirika.
- 20 Chn. : Ammirika.
- 21 Tr. : [Writes on the board].
- 22 Chn. : [Watches him as he writes].
- 23 Tr. : Abaawa.
- 24 Chn. : Abaawa.
- 25 Tr. : Abaawa.
- 26 Chn. : Abaawa.
- 27 Tr. : Hwe ha. Hwe nea mere ekyere wo ye abaawa.
- 28 Chn. : Abaawa. [then laughing and talking together].
- 29 Tr. : Fidie.
- 30 Chn. : Fidie.
- 31 Tr. : Fidie.
- 32 Chn. : Fidie.
- 33 Tr. : Fidie.
- 34 Chn. : Fidie.
- 35 Int. : [Noise from neighbouring class]

36	Tr..	:	<u>Menim</u>
37	Chn.	:	<u>Menim.</u>
38	Tr.	:	<u>Menim.</u>
39	Chn.	:	<u>Menim.</u>
40	Tr.	:	<u>ɔnim.</u>
41	Chn.	:	<u>ɔnim.</u>
42	Tr.	:	<u>ɔnim.</u>
43	Chn.	:	<u>ɔnim.</u>
44	Tr.	:	<u>Ampesie.</u>
45	Chn.	:	<u>Ampesie.</u>
46	Tr.	:	<u>Ampesie.</u>
47	Chn.	:	<u>Ampesie.</u>
48	Tr.	:	<u>Ammirika.</u>
49	Chn.	:	<u>Ammirika.</u>
50	Tr.	:	<u>Ammirika.</u>
51	Chn.	:	<u>Ammirika.</u>
52	Tr.	:	<u>Abaawa.</u>
53	Chn.	:	<u>Abaawa.</u>
54	Tr.	:	<u>Abaawa.</u>
55	Chn.	:	<u>Abaawa.</u>
56	Tr.	:	<u>Fidie.</u>
57	Chn.	:	<u>Fidie.</u>
58	Tr.	:	<u>Fidie.</u>
59	Chn.	:	<u>Fidie.</u>
60	Tr.	:	<u>ɔnim.</u>
59	Chn.	:	<u>ɔnim.</u>
60	Tr.	:	[Points to 'menim' on the board].
61	Chn.	:	<u>Menim</u> [amid talking together].
62	Tr.	:	Is alright, <u>menim</u>
63	Chn.	:	<u>Menim.</u>
64	Tr.	:	<u>ɔnim.</u>
65	Chn.	:	<u>ɔnim.</u>
66	Tr.	:	<u>Ampesie.</u>
67	Chn.	:	<u>Ampesie</u>
68	Tr.	:	<u>Ammirika.</u>
69	Chn.	:	<u>Ammirika.</u>
70	Tr.	:	<u>Abaawa.</u>
71	Chn.	:	<u>Abaawa.</u>
72	Tr.	:	<u>Fidie.</u>
73	Chn.	:	<u>Fidie.</u>
74	Tr.	:	Obia nsore ngyina hɔ.
75	Chn.	:	[stand up]
76	Tr.	:	Afei me, me minka bi bio. Mede siso a na mo a kan.
77	Chn.	:	Yes sir.
78	Tr.	:	[Points].
79	Chn.	:	<u>Menim.</u>

80	Tr.	:	[Points].
81	Chn.	:	<u>ɔnim.</u>
82	Tr.	:	[Points].
83	Chn.	:	<u>ɔnim.</u>
84	Tr.	:	[Points].
85	Chn.	:	<u>Ampesie.</u>
86	Tr.	:	[Points].
87	Chn.	:	<u>Ampesie.</u>
88	Tr.	:	[Points].
89	Chn.	:	<u>Ammirika.</u>
90	Tr.	:	[Points].
91	Chn.	:	<u>Ammirika.</u>
92	Tr.	:	[Points].
93	Chn.	:	<u>Abaawa.</u>
94	Tr.	:	[Points].
95	Chn.	:	<u>Abaawa.</u>
96	Tr.	:	[Points].
97	Chn.	:	<u>Fidie.</u>
98	Tr.	:	[Points].
99	Chn.	:	<u>Fidie.</u>
100	Tr.	:	[Points].
101	Chn.	:	<u>Menim</u>
102	Tr.	:	[Points].
103	Chn.	:	<u>ɔnim</u>
104	Tr.	:	[Points].
105	Chn.	:	<u>Ampesie</u>
106	Tr.	:	Bio
107	Chn.	:	<u>Ampesie/ apesie.</u>
108	Tr.	:	ɛbinom se apesie.
109	Chn.	:	<u>Ampesie.</u>
110	Tr.	:	ɛnye apesie. Wahunu se /m/ hye hɔ?
111	Int.	:	Give the chalk to her.
112	Tr..	:	Na ɛbi soso ɛka apesie. Wahunu se /m/ hye ha?
113	Chn.	:	Yes sir.
114	Tr.	:	Nti ye nfrɛ no apesie. ɛye ampesie. Ye nyinaa.
115	Chn.	:	<u>Ampesie.</u>
116	Tr.	:	ɛbio
117	Chn.	:	<u>Ampesie.</u>
118	Tr.	:	[Points]. Mhum.
119	Chn.	:	<u>Ammirika</u>
120	Tr.	:	ɛbio
121	Chn.	:	<u>Ammirika</u>
122	Tr.	:	[Points]
123	Chn.	:	<u>Abaawa.</u>
124	Tr.	:	[Points]. Mhum
125	Chn.	:	<u>Ampesie.</u>

126	Tr.	:	[Points]
127	Chn.	:	<u>Fidie.</u>
128	Tr.	:	Seesei deε mo ahunu se deε εdidiso⊃. Mede be toto. Nti mede sisoa na mo ab⊃ din. [Points].
129	Chn.	:	<u>Menim.</u>
130	Tr.	:	[Points]
131	Chn.	:	<u>Fidie</u>
132	Tr.	:	[Points]
133	Chn.	:	<u>Ampesie.</u>
134	Tr.	:	[Points]
135	Chn.	:	<u>Abaawa</u>
136	Tr.	:	[Points].
137	Chn.	:	<u>Ammirika.</u>
138	Tr.	:	[Points].
139	Chn.	:	<u>⊃nim.</u>
140	Tr.	:	Nafo⊃ nkoa. [Points].
141	Chn.	:	<u>⊃nim.</u>
142	Tr.	:	[Points].
143	Chn.	:	<u>Ampesie.</u>
144	Tr.	:	[Points].
145	Chn.	:	<u>Ammirika.</u>
146	Tr.	:	[Points].
147	Chn.	:	<u>Abaawa.</u>
148	Tr.	:	[Points].
149	Chn.	:	<u>Fidie.</u>
150	Tr.	:	[Points to second row].
151	Chn.	:	[Talking together].
152	Tr.	:	[Points]
153	2G	:	<u>⊃nim.</u>
154	Tr.	:	[Points].
155	2G	:	<u>Ampesie.</u>
156	Tr.	:	[Points].
157	2G	:	<u>Ammirika.</u>
158	Tr.	:	[Points].
159	2G.	:	<u>Abaawa.</u>
160	Tr.	:	[Points].
161	2G.	:	<u>Fidie.</u>
162	Tr.	:	[Points to a third group]. Mo na mo aka. [Points].
163	Chd.	:	<u>Menim.</u>
164	Tr.	:	Mo nyinaa
165	3G.	:	Yes sir.
166	Tr.	:	[Points].
167	3G.	:	<u>Menim.</u>
168	Tr.	:	[Points].
169	3G.	:	<u>⊃nim.</u>
170	Tr.	:	[Points]

- 171 3G. : Ampesie.
 172 Tr. : [Points].
 173 3G. : Ammirika
 174 Tr. : [Points].
 175 3G. : Abaawa.
 176 Tr. : [Points].
 177 3G. : Fidie.
 178 Tr. : Ye fa ye nhoma na eyde ogya ahye mu. Na ye kinkan
 no wɔ ye tiri mu
 179 Chn. : [Talking together].
 180 Tr. : Mo ntenatena akuokuo no a me kye ye no. Akuoakuoa
 me kyekye ye no. **group** no a ye kyekye ye no. (Move to the groups).
 181 Chn. : [Talking together].
 182 Tr. : **Now give them out.** Osei Boatema [instructs
 distribution of pupils books]
 183 Chn. : [Sit in three groups and talk together].
 184 Tr. : Afei obia ebue krataafa nwɔtwe. **Lesson 8, page 26.**
 Krataafa nwɔtwe, edisua, eei! Krataafa eduonusia. edi sua etso
 nwɔtwe.
 185 Chn. : [Open books].
 186 Tr. : Afei obia, group bia nkan ne dee bɔɔkɔ. Group bia
 nkan ne dee bɔɔkɔ. Me wei a mbɛ bisa mo nsemsem bi. Nti wo ankan
 nea mbɛ hunu sɛ wo ankan.
 187 Chn. : [Murmuring the words they read].
 188 R. : [Group one's silent reading. They mummer].
 189 1G. : Menim abaawa bi. Wɔfrɛ no Asɔ. ɔnim asuo kɔ.
ɔnim apra nso. Menim abaawa bi. Wɔfrɛ no Asɔ. Menim
abarimaa bi. Wɔfrɛ no Efa.
 190 Tr. : Tina table wei so. Tina ha.
 191 1G. : ɔnim bɔɔl bɔ. ɔnim ammirika tu. Menim
abarimaa bi. Wɔfrɛ no Efa. Menim ɔpanin bi. Wɔfrɛ no Poku.
ɔnim fidie sum. ɔnim kooko te.
 192 Chn. : Noise(all groups reading aloud)
 193 R. : [Group two's silent reading. They mummer]
 194 2G : Menim ɔpanin bi. Wɔfrɛ no Poku. ɔnim fidie sum
 195 Chn. : [Noise: all groups reading aloud]
 196 R. : [Group two's silent reading. They mummer]
 197 3G. : Menim maame bi wɔfrɛ no Attah
 198 Chn. : [Noise: all groups reading aloud]
 199 R. : [Group two's silent reading. They mummer]
 200 1G. : Menim Abaawa bi. Wɔfrɛ no Asɔ. ɔnim asuo kɔ.
ɔnim apra nso. Menim Abaawa bi. Wɔfrɛ no Asɔ.
 201 Chn. : [Noise-all groups reading aloud]
 202 !G. : Menim ɔpanin bi. Wɔfrɛ no Poku.

- 203 Tr. : εε, σε wo kɔ hyia asem fuabi ya wo hwe a yan ankan.
emmo wo ntimi ebɔ din a, na wa paga ya wo nsa na yede enno abeka
yen nsem fuafua no ho. Mo ate?
- 204 Chn. : Yes sir.
- 205 Tr. : Mo nkɔ so
- 206 Chn. : Menim abarimaa bi. ɔfrɛ no Efa. ɔnim bɔɔl bɔ.
ɔnim ammirika tu Menim abarimaa bi wɔfrɛ no Efa. Menim
ɔpanin bi wɔfrɛ no Poku. ɔnim fidie sum
- 207 Chn. : [Noise-simultaneous recording of all three groups'
reading]
- 208 1G. : Menim ɔpanin bi . Wɔfrɛ no Poku. ɔnim fidie
sum. ɔnim kooko te. Menim ɔpanin bi . Wɔfrɛ no Poku.
- 209 3G. : Menim abaawa bi . Wɔfrɛ no Asɔ.
- 210 2G. : Menim abarimaa bi. Wɔfrɛ no Asɔ.
- 211 Chn. : [Noise -simultaneous recording of all three groups'
reading]
- 212 Tr. : Hwe mu bi na kan bi anye saa wo nhunu. Hein? Ye
nyinaa na yesua, wa te? Wɔ nom ebɔ din no, na woso wo bɔ bi, wa
te? Kan wei sei bi na sua sedee ye si bɔ asem fua no din
- 213 Chd. : Menim panin bi. Wɔfrɛ no Poku. ɔnim fidie sum.
- 214 .Chn. : [Noise]
- 215 Tr. : Wahu. Is correct. Wo akɔ sukuu?
- 216 2G. : Wɔfrɛ no
- 217 Chd. : [Nods].
- 218 Tr. : εhein, enneɛ waba ha ye a, enye sukuu no a wo kɔ no
enye ebi ne yei? Anaa ɔhɔ no na mo ne nkan Twi
- 219 2G. : Wɔfrɛ no Attah
- 220 Tr. : Mm
- 221 2G. : ɔnim fufuo wɔ. Menim maame bi.
- 222 Chn. : [Noise-all groups reading simultaneously].
- 223 Tr. : εye, εye, εye obia ngyae. Me be bisa mo nsem bi. Seesei
ya kan ne kakra. Wei yebɔ din sen?
- 224 Chn. : [Talking together].
- 225 Tr. : Paga wo nsa na ka kyere me. Me npe se mo nyinaa mo
beka. εwo mu se ye nyinaa ya kan ye ahu nso enye ye nyinaa enna ebia
yetimi bɔ edin sedee wo, wo hunu ye. enno nti me sane, sane abisa
bisa yie.
- 226 Chn. : [Silent.]
- 227 Tr. : Wei nso ye?
- 228 Chn. : ɔfrɛ.
- 229 Tr. : εbio.
- 230 Chd. : Wɔfrɛ.
- 231 Tr. : εhein kane wo se ɔfrɛ. Ye bɔ din wɔfrɛ. Mo nyinaa.
- 232 Chn. : Wɔfrɛ.

- 233 Tr. : Mo ahunu sɛ, deɛ ɛdikan sɛ ɛyɛ /ɔ/ dea, ɛnna nka yɛbɛ
bɔ din ɔfrɛ. Na wei /wɔ/ wɔfrɛ. Wei nso yɛ? Krakye hwɛ so na ka
bi. Bɔ ma me ntie. Yes ka no din.
- 234 Chd. : Poku.
- 235 Tr. : Yɛ nyinaa.
- 236 Chn. : Poku.
- 237 Tr. : ɛbio.
- 238 Chn. : Poku.
- 239 Tr. : Mhum. Nea nti a me bisa mo wei no, Asantefoɔ yɛ wɔ
saa ɛdin wei, ɛyɛ a yɛtaa de /ou/ de kan. Yɛde /ou/ no ba yɛbɔ din
sɛn?
- 240 Chd. : Opoku.
- 241 Tr. : Nti sɛ wo anhwɛ no yiye a, wo bɛkɔ akɔ kan no
Opoku. Nso nea ya twɛrɛ no nhoma no mu yɛ Poku. /ou/ ɛnehɔ. Nti
wo kan a na wo ahwɛ no yiye. (writes on the bb. and then point to it).
- 242 Chn. : [Watch teacher.]
- 243 Tr. : Bugatuga.
- 244 Bugatuga: Bɔɔl.
- 245 Tr. : ɛbio.
- 246 Chn. : Bɔɔl.
- 247 Tr. : Bɔɔl. Bɔɔl. Yɛ nyinaa.
- 248 Chn. : Bɔɔl.
- 249 Tr. : ɛbio.
- 250 Chn. : Bɔɔl.
- 251 Tr. : [Writes Efa on the bb.]
- 252 Chn. : [Watch what teacher writes on bb]
- 253 Tr. : Esther.
- 254 Chn. : Ifa
- 255 Tr. : ɛbio
- 256 Chn. : Efa /i:fa/
- 257 Tr. : Yes. Efa (/ ei f a /). ɛhein, wɔsɛ sɛn?
- 258 Chn. : Efa /i:fa/
- 259 Tr. : ɛnyɛ /i:fa/. Wo ka no /i:f ei/ wa si ne tiri ase. / ei f a /.
- Yɛ nyinaa
- 260 Chn. : Efa. (/ei f a /.)
- 261 Tr. : ɛbio.
- 262 Chn. : Efa.
- 263 Tr. : ɛbio.
- 264 Chn. : Efa.
- 265 Tr. : [Points to a word] Mhum.
- 266 Chn. : [Talking together].
- 267 Tr. : Yes.
- 268 Chn. : Fufuo.
- 269 Tr. : Fufuo. Yɛ nyinaa.
- 270 Chn. : Fufuo.

- 271 Tr. : εbio.
- 272 Chn. : Fufuo.
- 273 Tr. : εye, afei no nsane nkɔso. Mo nhwe no kakraa
- 274 Chn: Menim maame bi. Wɔfre no Atta. ɔnim ampesie bɔ.
ɔnim fufuo wɔ. Menim maame bi. Wɔfre no Atta. Menim
abaawa bi. Wɔfre no Asɔ. ɔnim asuo kɔ. ɔnim apra nso. Menim
abaawa bi. Wɔfre no Asɔ. Menim abarimaa bi. Wɔfre no Efa.
ɔnim bɔɔl bɔ. ɔnim ammirika tu Menim abarimaa bi. Wɔfre
no Efa. Menim ɔpanin bi. Wɔfre no Poku. ɔnim fidie sum. ɔnim
kooko te. Menim ɔpanin bi. wɔfre no Poku.
- 275 Tr. : Mo a ka awei. Wei deɛ ɛmu wɔ fo ma mo. Nti mo akye
no ntem. Nawɔtewe baako no, deɛ ye kenkan ye no. Wei ye bɔ din
sɛn?
- 276 Chd. : Anwummere
- 277 Tr. : Anwummere, anwummere. Mo aye ades. Wei deɛ ɛmu
wɔfo. Seesei a wɔ nom aye no ayi. Mo nkɔso
- 278 Chn. : Menim maame bi. Wɔfre no Atta. ɔnim ampesei
bɔ. ɔnim fufuo wɔ. Menim maame bi. Wɔfre no Atta. Menim
abaawa bi. Wɔfre no Asɔ. ɔnim asuo kɔ. ɔnim apra nso. Menim
abaawa bi. Wɔfre no Asɔ. Menim abarimaa bi. Wɔfre no Efa.
ɔnim bɔɔl bɔ. ɔnim ammirika tu. Menim abarimaa bi. Wɔfre
no Efa.
- 279 Tr. : εye, sɛ saa deɛ a yeɛ bɛ kan ne kakra ahwe. Wo nkoa
kan ma yentie.
- 280 Chd. : Menim maame bi. Wɔfre no Atta.
- 281 Tr. : Pagya wo ne a kakra.
- 282 Chd. : Menim maame bi. Wɔfre no Atta.
- 283 Tr. : Obia nhwe ne deɛ mu.
- 284 Chd. : ɔnim ampesie bɔ.
- 285 Tr. : Deɛ wo tena no ye hu.
- 286 Chd. : ɔnim fufuo wɔ. Menim maame bi. Wɔfre no Atta.
- 287 Tr. : Obeng wo so kan ma yentie. Deɛ etɔso mmeinu no.
- 288 Chn. : Menim abarimaa bi. Menim abaawa bi. Wɔfre no
Asɔ. ɔnim asuo kɔ. ɔnim apra nso. Menim abaawa bi. Wɔfre no
Asɔ.
- 289 Tr. : εye, sɛ wo akan nea, hwe nnee εwɔ hɔ no na wo abɔ
din, sɛ wahunu?
- 290 Chn. : Yes sir.
- 291 Tr. : Hum, wa ye ades. Woso kan ma yentie. Deɛ etoaso
mmeensa no.
- 292 Chn. : Menim abarimaa bi.
- 293 Tr. : Obia nhwe ne deɛ mu.
- 294 Chd. : Wɔfre no Efa. ɔnim bɔɔl bɔ. ɔnim ammirika tu.
Menim abarimaa bi. Wɔfre no Efa.
- 295 Chn. : [Talking together].

- 296 Tr. : Jonahs wo so kan deε εtoaso εma yentie
 297 Jonahs : [No response].
 298 Tr. : Wodeε wo ankan ne bi? Nti wo ntimi nb⊃ baako kora
 din?
 299 Chn. : [Talking together].
 300 Tr. : **Okay, Yes** Kan ma yentie. Deε εtoaso εnan no.
 301 Chd. : **Menim panin bi. W⊃frε no Poku. ⊃nim fidie sum.**
⊃nim kooko te. Menim ⊃panin bi. W⊃frε no Poku
 302 Tr. : Mo.
 303 Chd. : ⊃panin w⊃ka no panin.
 304 Tr. : εε, Mo nteie. εden na mo hunu nu w⊃ Adoma akenkan
 no ho?
 305 Chn. : ⊃panin no w⊃ka no panin.
 306 Tr. : Panin se wahunu? asem no bi nono. eye ⊃panin. /⊃/ ye
 nyinaa.
 307 Chn. : **⊃panin.**
 308 Tr. : Ye nyinaa.
 309 Chn. : **⊃panin.**
 310 Tr. : εbio.
 311 Chn. : **⊃panin.**
 312 Tr. : εbio.
 313 Chn. : **⊃panin.**
 314 Tr. : Kan ma yentie.
 315 Chn. : **Menim maame bi w⊃frε no Atta. ⊃nim ampesie**
b⊃. ⊃nim fufuo w⊃. Menim maame bi. W⊃frε no Atta.
 316 Tr. : eye, eye me se wei deε mo afa no fo, enti ama yεbre
 kora bi aka. Nti ye be bisa msem kakra w⊃ aseε no.
 317 Chn. : [Talking together].
 318 Tr. : eye. enno deε na ete saa deε a, mo ahunu se nsem bisa
 bi w⊃ aseε h⊃.
 319 Chn. : **Yes sir.**
 320 Tr. : Yεbe bua. Saa na w⊃twe wei deε yede deε εda yenim
 no so be ka ho. W⊃se bua nsem yi. Deε edikan maame ben na menim
 no? Maame ben na menim no? Yes.
 321 Chd. : **Attah.**
 322 Tr. : εbio.
 323 Chd. : **Attah.**
 324 Tr. : Dabi. eye, na nka hwan na εbetumi aka no yiye paa?
 W⊃se maame ben na menim no?
 325 Chn. : **Maame Attah.**
 326 Tr. : **Maame Attah,** se wo ahunu? Nk⊃ kase Attah. Attah
 wo ti pen nono? [laughs] Maame Attah. eye obi nka de εtoaso mmeinu
 no εma yen. Vida.
 327 Vida. : Nnua
 328 Tr. : Kan no den

- 329 Chd. : Nnuane *ben a saa** maame yi* nim *noa pa ara.
- 330 Tr. : Mo nduane ben na saa maame yi nim nua paa ara?
Wɔse nduane ben? Yes.
- 331 Chd. : Fufuo.
- 332 Tr. : **Maame Atta nim fufuo nua. Maame Atta nim fufuo nua. eye, wɔse nnuane o!**
- 333 Chn. : **Ampesie.**
- 334 Tr. : Ampesie. ebi kaho bio?
- 335 Chn. : **No sir.**
- 336 Tr. : enno deɛ na ekyere se Maame Atta nim fufuo enne deɛben?
- 337 Chn. : **Ampesie**
- 338 Tr. : Ampesie nua papaapa. Nea etɔso mmeensa obi ekan ma yen hwe. Asembisa etɔso mmeensa no.
- 339 Chd. : Hwan na
- 340 Tr. : He to wobu. eye a kan no den.
- 341 Chd. : Hwan na ɔfre, e! yi
- 342 Tr. : Hwe no yiye na kan
- 343 Chd. : ɔnim [another child whispers to the reader].
- 344 Chd. : **Hwan na ɔnim asuo kɔ san* nim apra nso?**
- 345 Tr. : eye, wo aye adeɛ nanso biribi eka mu hɔ kakra. Mo hunu ye?
- 346 Chn. : **Yes sir.**
- 347 Tr. : ehein, kan no yiye ma yentie.
- 348 Chd. : **Hwan na ɔnim asuo kɔ sane nim apra nso?**
- 349 Tr. : Eheine, sane nim apra nso. eye hwan a?
- 350 Chd. : **Maame Asɔ.**
- 351 Tr. : Yie! Dabi. Asɔ wɔ ye maame?
- 352 Chd. : **Asɔ.**
- 353 Tr. : Asɔ deɛ wɔte se moa. Wo aye adeɛ mo. Obi nkan asem bisa etɔso enan no. Kan ma yentie.
- 354 Chd. : **Efa nim bɔɔl bɔ na ɔnim mmirika tu nso.**
- 355 Tr. : Kan no yie
- 356 Chn. : **Efa nim bɔɔlbɔ na ɔnim mmirika tu nso.**
- 357 Tr. : Wahunu nea ewɔhɔ no? Hwan na wɔte aseɛ? Nea wɔde ahyyehye anim hɔ no
- 358 Chd. : Wɔse **Efa nim bɔɔlbɔ na ɔnim ammirika tu nso. eye ampa ana eye atorɔ?**
- 359 Tr. : Mo. Wahunu se wɔde ampa enna wa sane asan, wa ye abaa bi enna wa ye atorɔ. Nea eye a na yeye bi true or false. ebi na wɔde aba ha no. Na , na Asante, ne Twi nono. Wɔse ampa ana atorɔ. Mhum, Bugatuga.
- 360 Bugatuga : **Ampa**
- 361 Tr. : Aha ka wo deɛ.
- 362 Chd : **Ampa**

- 363 Tr. : Nyame.
 364 Nyame: Ampa.
 365 Tr. : eye a mo nkasa den. Mhum.
 366 Chd : Ampa.
 367 Tr. : Ampa Efa ɔnim bɔɔlbɔ esane nim mmirika tu.
 Aka ye asem bisa baako pe.
 368 Chn : [Talking together].
 369 Tr. : **Okay** kan ne ma yen nea.
 370 Chd. : Panin ben.
 371 Tr. : Se wo akan bi?
 372 Chn : Wa kan bi.
 373 Tr. : Kan ma yen (pointing to another child).
 374 Chn : ɔpanin ben na ɔnim afidie sum sa ne sana.
 375 Tr. : Sane
 376 Chn : Sane nim kooko te nso?
 377 Tr. : Sane kan ne no bio na kan no yie.
 378 Chn : ɔpanin ben na ɔnim fidie sum sane ne nim kooko
te nso?
 379 Tr. : ɔpanin ben na ɔnim fidie sum sane nim kooko te
nso? ɔpanin ben a? Yepe obia ɔnkasa enne. ehe, wo. Panin ben a?
 380 Chd. : **Panin Poku.**
 381 Tr. : Mo. Saa wo ye adee na wa ye kom saa no. ɔpanin
Poku. eye.

APPENDIX 5 (20) TF: English.

SCHOOL : MAKARANTA BORBOFO
CLASS : P5
TEACHER : "T F"
SUBJECT : ENGLISH LANGUAGE COMPOSITION
TOPIC : MY CLASS TEACHER (DESCRIPTION)
DATE : 27TH FEBURARY, 1996

- 1 Tr. : We are coming to do composition and our topic today is about our teacher. So you are going to write as your heading the topic "About my Teacher" [Writes the topic on the bb]
- 2 Chn : Watch.
- 3 Tr. : Now we have done, we have described ourselves isn't it?
- 4 Chn : Yes sir.
- 5 Tr. : Yes, so we are going to depend on that to learn how to describe our teacher.
- 6 Chn : [Talking together].
- 7 Tr. : First, [writes on the bb] What's your name? Vida.
- 8 Vida : My name is Vida Achiaa.
- 9 Tr. : What's the name of your teacher?
- 10 Vida : My teacher is Miss. Amoako
- 11 Tr. : My teacher's name is Mr. Amoako, say that.
- 12 Vida : My teacher name
- 13 Tr. : My teacher's name
- 14 Chn : My teacher's name is Miss Amoako
- 15 Tr. : Mr.
- 16 Chn : Mr. Amoako.
- 17 Tr. : Good, eh, here you said my name is Vida Achiaa. Since it is you, you said, my name is. But when you are talking about somebody, my teacher, mm! My teacher's, my friend's, my mother's, my father's, hein! When you are not talking about yourself but somebody. Is that clear?
- 18 Chn : Yes sir.
- 19 Tr. : So what's the name of your teacher? Adu.
- 20 Adu : My teacher is Mr Amoako.
- 21 Tr. : No, I said when you are talking about somebody you say, 'My teacher's', eh! You are not talking about yourself. So you cannot say my name. Hum! My teacher's name is Mr. Amoako. Is that clear? What is your teacher's name?
- 22 Adu : My teacher's name is Mr. Amoako.
- 23 Tr. : Good, all of you.
- 24 Chn : My teacher's name is Mr. Amoako.
- 25 Tr. : Mhum
- 26 Chn : [Talking together].
- 27 Tr. : So, where does he come from?

- 28 Chn : Turn round to look at each other and murmuring.
- 29 Tr. : You don't know your teacher's hometown. So I am going to tell you your teacher's hometown. So you form a sentence with it.
- 30 Chn : [Murmuring].
- 31 Tr. : I come from Cocoa-Mu. So I want somebody to form a sentence using where your teacher comes from.
- 32 Chn : Quiet
- 33 Tr. : Where does your teacher come from?
- 34 Chn : Show of hands.
- 35 Tr. : Yes. [Points to a child] Where do you come from?
- 36 Chd. : I come from Makaranta.
- 37 Tr. : I come from Makaranta. Next time, where does your teacher comes from? My teacher, eh comes from * then you add the name of the town, isn't it? My teacher comes from Cocoa-Mu. All of you.
- 38 Chn : My teacher comes from Cocoa-Mu.
- 39 Tr. : My teacher comes from Cocoa-Mu. All of you.
- 40 Chn : My teacher comes from Cocoa-Mu.
- 41 Tr. : Yes where does your teacher comes from?
- 42 Chd : My teacher's. My teacher come from Cocoa-Mu.
- 43 Tr. : Again.
- 44 Chn : My teacher come from Ku
- 45 Tr. : Comes
- 46 Chn : Comes from Cocoa-Mu.
- 47 Tr. : Good [writes on the board]
- 48 Chn : [Look on]
- 49 Tr. : How old are you? Bugatuga.
- 50 Bugatuga: [No response]
- 51 Tr. : How old are you? Sumaila.
- 52 Sumaila: [No response].
- 53 Tr. : Okay how old are you [points to another child]
- 54 Chd : I am eleven years old.
- 55 Tr. : I am eleven years old. How old are you? Peter.
- 56 Peter : I am eleven years old.
- 57 Tr. : Can't you speak?
- 58 Chd : I am eleven years old.
- 59 Tr. : Good. How old are you? [points to another child]
- 60 Chd : I am
- 61 Chn : [Laughing]
- 62 Tr. : You don't know your age. How old are you? [points to a child].
- 63 Chd : I am eleven years old.
- 64 Tr. : Okay how old is your teacher?
- 65 Chn : Quiet.
- 66 Tr. : Okay here you can if you are asked to write about your teacher whereby you don't know the age of your teacher. What will

you do? You will say something for him. But here we are now learning. Your teacher is about fifty two years old.

- 67 Chn : Yee!
- 68 Tr. : So you say my teacher is fifty two years old. All of you.
- 69 Chn : My teacher is fifty two years old.
- 70 Tr. : Again
- 71 Chn : My teacher is fifty two years old.
- 72 Tr. : Yes, how old is your teacher?
- 73 Chn : My teacher is fifty two years old.
- 74 Tr. : Good.
- 75 Chn : [Talking together].
- 76 Tr. : How does she look like?
- 77 Chn : Quiet.
- 78 Tr. : Wɔte sɛn?
- 79 Chn : Quiet
- 80 Tr. : Yes here you are going to talk about how your teacher looks like. What we did in 'Myself'. You start to describe yourself. I have a bushy hair. I have two big eyes. I have a pointed nose. I have a big mouth. I have a small mouth, ehein, and so on. So you are going to tell how your teacher looks like.
- 81 Chn : [Watch the teacher].
- 82 Tr. : Yes let us start. Mhum, yes Bugatuga
- 83 Bugatuga: [No response].
- 84 Tr. : My teacher has a round face. ehein. My teacher has a pointed nose. Yes.
- 85 Bugatuga: Black.
- 86 Tr. : My teacher is black. Okay lets take it. Yes can't you talk about your teacher? What attire your teacher likes best. What shirt does your teacher like? Yes.
- 87 Chd. : Red
- 88 Tr. : Red what?
- 89 Chd. : Shirt.
- 90 Tr. : Ah! But can't you say it? What trousers your teacher like using it.
- 91 Chn : [Raise hands up].
- 92 Tr. : [Points to a child].
- 93 Chd. : Black.
- 94 Tr. : Black trousers. How many eyes has your teacher? How many eyes? Yes.
- 95 Chd. : Two eyes.
- 96 Tr. : My teacher has two eyes. How many ears has your teacher? Yes.
- 97 Chd. : Two years.
- 98 Tr. : Two ears. You can say my teacher has two ears. Let us all say, 'My teacher has'.
- 99 Chn : [No response].
- 100 Tr. : My teacher has

- 101 Chn : My teacher has
 102 Tr. : Again.
 103 Chn : My teacher has
 104 Tr. : Aha, so with this phrase, you can add something to
 make it a sentence. My teacher has a nose. My teacher has a mouth.
 My teacher has two ears. My teacher has two eyes. My teacher has
 two long hands. Eh!
 105 Chn : Yes sir
 106 Tr. : Mm
 107 Chn : Quiet.
 108 Tr. : My teacher has ** Yes. How many legs has your
 teacher? Legs. Don't you know legs? How many legs has your
 teacher?
 109 Chn : Two legs.
 110 Tr. : I said use, 'My teacher has'
 111 Chn : My teacher has two legs.
 112 Tr. : Again
 113 Chn : My teacher has two leg.
 114 Tr. : Right, we are going to write the composition. We are
 going to write about our teacher. What, all what we have said about
 our teacher orally, we are going to write it down. Is that clear? [Writes
 on the board]
 115 Chn : [Watch teacher]
 116 Tr. : Number one read. Yes [points to a child].
 117 Chd. : The name of my teacher is
 118 Tr. : Then you add the name hein!
 119 Chd. : Yes sir.
 120 Tr. : Yes [points to a child and then to the next sentence on
 the board].
 121 Chd. : He comes from
 122 Tr. : He comes from where?
 123 Chd. : Cocoa-Mu
 124 Tr. : Good.
 125 Chn : **Wei deɛ yɛ bɛtimi atwɛɛ.**
 126 Tr. : Hey!
 127 Chd. : **Wei, na wa te.**
 128 Tr. : Leave her. Sit down. Yes number three. [points to a
 child].
 129 Chn : He is. He is* years old
 130 Tr. : He is how many years old? Sylvia.
 131 Sylvia : He is fifty two years old.
 132 Tr. : Good. [Writes on the board].
 133 Chn : Look on
 134 Tr. : Yes [points to a child].
 135 Chn : He uses red and black trousers.
 136 Tr. : Good. He uses red and black, * trousers. Red shirt and
 black trousers. Hein! Yes?

- 137 Chn : Yes sir.
- 138 Tr. : Say that, he uses red shirt and black trousers.
- 139 Chd. : He uses the * red shirt and black trousers.
- 140 Tr. : He uses red shirt and black trousers. All of you.
- 141 Chn : He uses red shirt and black trousers.
- 142 Tr. : Good. [writes on the board].
- 143 Chn : Look on as he writes.
- 144 Tr. : Yes [points to a child].
- 145 Chd. : She is black in complexion
- 146 Tr. : She is black in * She said what? Colour? He is dark in colour or compression. Good. Now we are going to write. Take your exercise books and write. Put down your date write the topic, 'About my teacher'.
- 147 Chn : [Talking together] and a child distributes pupils exercise books.
- 148 Tr. : What is the talking for?
- 149 Chd. : Book no
- 150 Tr. : What book?
- 151 Chd. : English
- 152 Tr. : He! Sit down she will bring it to you. Go and sit down
- 153 Chn : Writing.
- 154 Tr. : Shetu, write it nicely.
- 155 Chn : [Working: copying and completing sentences on the board].
- 156 Tr. : [Goes round checking pupils' work].
- 157 Chn : [Working].
- 158 Tr. : Where is your exercise book? You are the new comer? Tell your father to buy exercise books for you. Hum?
- 159 Chd. : Yes sir.
- 160 Tr. : Hey! Are you not writing? where is your pen?
- 161 Chd. : **enba.**
- 162 Tr. : Hein?
- 163 Chd. : **enba**
- 164 Tr. : Hein?
- 165 Chd. : **Mese enba.**
- 166 Tr. : I don't hear you.
- 167 Chd. : **enba!**
- 168 Tr. : Get this pen.
- 169 Chn. : [Talking while working].
- 170 Tr. : Have you finished? Have you finished? Mm? Have you finished?
- 171 Chd. : No sir.
- 172 Chn. : [Working].
- 173 Tr. : [Goes round].
- 174 Chd. : **Dee ya twere agu h▷ no aka number four no ho?**
- 175 Tr. : **Hum?**
- 176 Chn : **Dee ya twere agu h▷ no aka number four no ho?**

- 177 Tr. : Yes
- 178 Chd. : Teacher, me pa wo kyeew dee ya twere agu hɔ no
εhyε number three no so?
- 179 Tr. : No, it is here. The red shirt and black trousers.
- 180 Chn : [Working].
- 181 Tr. : You are now coming to school! Why?
- 182 Chd. : [No response]
- 183 Chn : Wɔ baa yε akyε.
- 184 Tr. : Go and sit down.
- 185 Chn : [Working].
- 186 Tr. : Get ready to stop work. If you have finished put it on
the table. Keep it on my table not your table
- 187 Chd. : Teacher book wei sei no, dee wɔkyekye book no se
εye English.
- 188 Tr. : Let me see. No this is Ghanaian language. Can't you
see? What is this?
- 189 Chd. : Ghanaian language
- 190 Tr. : Why did you give it to her to work with?
- 191 Chd : εbi εnim
- 192 Tr. : How many of you have not finished?
- 193 Chn : [Working].
- 194 Tr. : Hurry up
- 195 Chn : [Working].
- 196 Tr. : You stop work.

APPENDIX 5 (21) TF: Science

SCHOOL : MAKARANTA BORBOFO
 CLASS : P5
 TEACHER : "TF"
 SUBJECT : ELEMENTARY SCIENCE
 TOPIC : AIR EXERTS PRESSURE
 DATE : 28TH. FEBRUARY, 1996

- 1 Tr. : Today we are going to learn science and we are going to continue the air exerts pressure. Air exerts pressure. All of you.
- 2 Chn : Air exerts pressure.
- 3 Tr. : Good, last week we got to know that everything occupies space and has weight too. And everything that has weight can occupy space, a space. Well today we are going to divide ourselves into two groups. This side will form one group and this side will also form another group. So come round. Come here. Don't bring your chair. You come.
- 4 Chd : **Wo gyina hɔ?**
- 5 Tr. : Come. You also come here
- 6 Chn : Move to the front of the class.
- 7 Tr. : This is your bowl and you also your bowl. Today you are going to perform the activity for us to see.
- 8 Chn : Organising themselves in their groups.
- 9 Tr. : You are going to perform the activity so point a leader. You also point a leader. Serwah do it for us as I did last week.
- 10 Serwah: **Atta panin wɔ ha.**
- 11 Tr. : **Hwan na ɛye mo leader?**
- 12 Chn : Sir Georgina, Georgina. [and then talking together].
- 13 Tr. : **Fa no ntem, na obi nso nkɔfa ne dee no bi.**
- 14 Chn : **Mo mbra ha, mo bra**
- 15 Tr. : Stop talking
- 16 Chn : [Talking together].
- 17 Chd. : **Medee mo ye no ntem.**
- 18 Chn : [Talking together].
- 19 Tr. : Then you observe it. What will happen.
- 20 Chd. : **Fa to hɔ ye.**
- 21 Chd. : **Gye ne muaɛ**
- 22 Tr. : **Na saa na mo ye no?**
- 23 Chn : **Glass no ɛnye. Glass no ano** [rest in audible].
- 24 Tr. : Ahaa, I see.
- 25 Chd. : **Kɔ kye me hankakye mame**
- 26 Chd. : **Agyeei! Wa kum me!**
- 27 Chn. : **Yei dee, yɛɛ, ye bia nnye**
- 28 Tr. : Is alright. is alright.
- 29 Chd. : **Ye ka a, na wo.**

- 30 Tr. : Now what?
- 31 Chd. : Ya wie [group B]
- 32 Chd. : Yes
- 33 Chd. : W▷ no wo hunu den?
- 34 Tr. : All of you come here.
- 35 Chd. : Mo nyinaa mo mbra
- 36 Chn. : [Talking together].
- 37 Tr. : Stand here. Now watch. What has stop the water coming?
- 38 Chn. : Mframa, mframa.
- 39 Tr. : Now watch again
- 40 Chd.. : Mframa.
- 41 Chd. : Mframa nnim
- 42 Tr. : Yes, wo ahunu se mframa no entumi eba. eso kataa a mframa no entumi mba. Nti no na ekyere se agyae. Me gyei mu a na mframa no pe se eba mu, na epiya nsuo no na enno so eba
- 43 Chn : eden ne yie!
- 44 Tr. : This shows that air has what? Air has what? Pressure.
- 45 Chn : [Talking together].
- 46 Tr. : Air exerts pressure. Wei kyere yen sen?
- 47 Chn : emframa no
- 48 Tr. : Mframa no w▷
- 49 Tr+Chn: Tumi.
- 50 Tr. : Ah! etumi pia biribi.
- 51 Chn : Yes sir [then Talking together].
- 52 Chd. : Mo ma yentie
- 53 Tr. : Go for that glass. K▷ gye glass baako no bra.
- 54 Chn : Akwesi [Talking together].
- 55 Tr. : Then you watch it.
- 56 Chd : Adum
- 57 Tr. : Why is the flame of the candle went off? Why? eden nti na candle no ne gya dum ye?
- 58 Chn : Mframa enna.
- 59 Tr. : ekyere se mframa noa ewomu no ayeden?
- 60 Chn : Adum
- 61 Tr. : Asa, nti nsuo no so aye den?
- 62 Chd : ewura mu.
- 63 Chn : Mframa no pese epia no.
- 64 Tr. : Nti no eye den?
- 65 Chn : epia no k▷/ewura mu.
- 66 Tr. : Mo nkasa baako baako, ehein.
- 67 Chd. : epia no k▷ mu.
- 68 Tr. : epia nsuo no.
- 69 Chd : ekom.
- 70 Tr. : Nti nsuo no nso pe bebi afa. Nti na ew se ek▷ bebia ▷h▷ mframa no asa no. Se wahunu?

- 71 Chn : Yes sir.
- 72 Tr. : Kɔ fa ɔba no bra.
- 73 Chd : Mo nkɔ fa ɔba no bra.
- 74 Chd : Wo dwane kɔ he? Kɔ fa ye deɛ bra. Wode kɔ he?
- 75 Chd : Fa bra. Monfa yedeɛ maye. Mo nfa ya deɛ ma yen.
- 76 Chd. : ɔba no wɔ he?
- 77 Tr. : eyɛ
- 78 Chd. : Firi hɔ mbɛ bɔ bi
- 79 Tr. : eyɛ, saa wei no akyere yen sɛ mframa
- 80 Chn. : ɛwɔ
- 81 Tr. : ɛwɔ tumi yaa ɛmu wɔ duru. Yaa ɛtumi pia adeɛ bi kɔto bebɛia ɛhɔ da hɔ kwa. Nti yaa, wie. Obia nkɔ tena bebɛia wɔ tee. Obia nkɔ tena bebɛia wɔ tee. Go to your seats. Go back to your seats.
- 82 Chn : [Talking together].
- 83 Tr. : Go back to your seats. Now we are coming to draw the two activities into our exercise books
- 84 Chd. : Yes sir.
- 85 Tr. : Bring the science exercise books.
- 86 Chn : [Talking together].
- 87 Tr. : Stop talking , stop talking. Sit down.
- 88 Chn : [Talking together].
- 89 Tr. : This is what we are going to draw. When the cup was not covered look at how the water was flowing and when the cup was covered it stopped showing that the air which was pressing the water had no strength to push again. So the water stop. And here when the cup was not covered, the water, the air got the chance to press the water. So the water came through the hole. You put down your date.
- 90 Chd : [Inaudible].
- 91 Tr. : Yes go on.
- 92 Chn : [Working].
- 93 Tr. : [Goes round].
- 94 Chn : [Working].
- 95 Tr. : Fa firi hɔ ye.
- 96 Chn : [Working].
- 97 Tr. : Na wote hɔ yɛdɛn? Hein?
- 98 Chd. : Me nya pencil.
- 99 Tr. : Eh, who has two pencils?
- 100 Chn : ɛwɔ he?
- 101 Tr. : Mo ne pɛ pencil tɔ koraa. Do you have pen?
- 102 Chd : [Nods]
- 103 Tr. : If you have pen you can use it. Twere ye! Hwe, you can't see your pen?
- 104 Chn : [Talking together].
- 105 Tr. : Hwe ye ne mmeinu nyinaa. Sɛ ne mmeinu na ye hunu ye.
- 106 Chn : [Drawing.]

- 107 Tr. : Won't you do it?
 108 Chd : [Inaudible]
 109 Tr. : You have no pen. Hein?
 110 Chn : No sir.
 111 Tr. : **O! Mo nkrɔfoɔ nt, O! Na yei deɛ, mo baa sukuu no
 be yɛdɛn?**
 112 Chn : [Working].
 113 Tr. : Very good Adomako. You have tried
 114 Chn : [Working].
 115 Tr. : Now get ready to stop work
 116 Chn : [Working].
 117 Tr. : Stop work.

APPENDIX 5 (22) TF: Mathematics

SCHOOL : MAKARANTA BORBOFO
CLASS : P5
TEACHER : " TF "
SUBJECT : MATHEMATICS
TOPIC : ADDITION OF LIKE FRACTIONS
DATE : 24TH JUNE, 1996

- 1 Tr. : We are going to do mathematics and our topic today is
in addition of fractions. We are going to do mental. Two times two.
- 2 Chd : Four.
- 3 Tr. : Five times two.
- 4 Chd. : Ten.
- 5 Tr. : Ten divided by two.
- 6 Chd. : Five.
- 7 Tr. : Now addition how do you understand it? What is
addition?
- 8 Chd. : Addition is putting two numbers or more numbers
together.
- 9 Tr. : Thank you. Clap for her.
- 10 Chn : [Clapping].
- 11 Tr. : Now we say we are going to do addition of fractions.
What is a fraction? Yes.
- 12 Chn : A fraction is part of a whole number.
- 13 Tr. : A fraction is part of a whole number. Thank you. Clap
for her.
- 14 Chn : [Clapping].
- 15 Tr. : This is a fraction. The number up has got a name and it
is called numerator. All of you.
- 16 Chn : Numerator.
- 17 Tr. : Again.
- 18 Chn : Numerator
- 19 Tr. : The down one is also denominator.
- 20 Chn : Denominator
- 21 Tr. : Again.
- 22 Chn : Denominator
- 23 Tr. : What name is given to this fraction?
- 24 Chd. : One out of two.
- 25 Tr. : One out of two. Clap for him
- 26 Chn : [Clapping].
- 27 Tr. : What name can we give to this fraction?
- 28 Chn : One out of three.
- 29 Tr. : One out of three. Good. Yes Bugatuga.
- 30 Bugatuga: One out of four.
- 31 Tr. : One out of four. Now we are going to add two
fractions together. and somebody said, addition, you are to put two or

more numbers together. Here we are going to put these two fractions together. *** Before you can put them together you have to get your LCM. L means what? Yes.

- 32 Chd. : Least.
33 Tr. : Least. All of you.
34 Chn : Least.
35 Tr. : C. Yes
36 Chn : Common.
37 Tr. : Common and M
38 Chn : Multiple.
39 Tr. : Multiple. Now you have to find the multiples of the two denominators. When I say denominator you know it.
40 Chn : Yes sir.
41 Tr. : It is the number down not the one up. So you have to find the multiples of the two denominators before you can get your least common ant then multiple. But here as the denominators are the same you have to choose only one to be your LCM
42 Chd. : Yes sir.
43 Tr. : So we are going to choose one of the denominators of the two fractions. Now our LCM is what? You.
44 Chd. : Four.
45 Tr. : Here we are going to divide the LCM by the denominator. So we take the first fraction. The denominator of the first fraction. We are going to use that. Divide the LCM by the denominator and you get what? Boateng.
46 Boateng: One
47 Tr. : That one we have got we are going to multiply the answer by the numerator of that fraction. You know we are dealing with the first fraction before the second fraction. So the first numerator is what you are going to multiply your answer by. One times one? Peter.
48 Peter : One.
49 Tr. : Good our numerator will be one. So you put it down. When you put the answer down you bring your sign and what is our sign?
50 Chn : Plus
51 Tr. : Plus. After putting down your sign which is plus or addition, you come to the second fraction. You use the denominator to divide the LCM. So four goes into four how many times? Adoma, Adomako
52 Adomako: One
53 Tr. : One, what will you do to that one you have got? Yes.
54 Chd. : We shall multiply answer by the numerator.
55 Tr. : Very good. Clap for her.
56 Chn : [Clapping].
57 Tr. : You are going to multiply your answer by the numerator as we did to the first one. Is that clear?

58 Chn. : Yes sir.
 59 Tr. : So our numerator is what?
 60 Chd. : One.
 61 Tr. : One. So we are going to multiply that one by the
 numerator which is one. One times one will give us what?
 62 Chd. : One.
 63 Tr. : One. Then you put that one down. Here we have got
 eh, new numerators and you are going to add the two new numerators.
 They are what? Name them. Nyame.
 64 Nyame: Two.
 65 Tr. : Name them first. What is this?
 66 Nyame: One.
 67 Tr. : One. [pointing to the second numerator]
 68 Nyame: One.
 69 Tr. : One plus one? Do you see? Then you add the two
 numerators. One plus one?. It will give what?
 70 Nyame: Two.
 71 Tr. : Two. You bring equal sign. So that when you added
 the two numerators you got two. You underline two because it is
 what? It is what?
 72 Chn. : Four.
 73 Tr. : No. why did you underline it?
 74 Chd. : LCM.
 75 Tr. : No, because it is a fraction and you know a fraction. As
 somebody said, something whole, then you divide it into any parts at
 all and you take one or two. So here it is going to be two out of
 76 Chn. : Four.
 77 Tr. : Four. Then you bring your LCM. Hum? You've
 finished. Is it understood now?
 78 Chn. : Yes sir.
 79 Tr. : I want some body to come to the board to work this
 one for us to see **** Somebody should read it for us. Yes
 80 Chd. : One out of two plus two out of two.
 81 Tr. : Very good. Who can do it for us? Somebody should try
 .Portia come and try. Hurry.
 82 Portia : Denominator no $\frac{1}{2}$ ade kor, two and two. Nti
 mbefa mu baako aye me LCM. Mede LCM no $\frac{1}{2}$ ak $\frac{1}{2}$ kye first
 fraction denominator no. Mede two, mede LCM no $\frac{1}{2}$ kye
 83 Tr. : No you are rather going to divide the LCM by the
 denominator of the first fraction
 84 Portia : Mede L, mede denominator, first fraction denominator
 no $\frac{1}{2}$ bek ak kye LCM no. Mb $\frac{1}{2}$ nya one.
 85 Tr. : No, when you get your answer what do you do again
 before. Okay, when eh, we got the answer what did we do?
 86 Portia : We shall multiply the answer by the numerator.
 87 Tr. : Yes we shall multiply the answer by the numerator of
 the fraction which we are dealing with.

- 88 Portia : Answer one no a me nya ye no mede bek ak timesi numerator no, na ma nya one. Na mede addition ahye h. Na maba second fraction. Mede L, denominator no ebek ak kye LCM. Mbɛ nya one, na mede one no ak ak kye, na mede one no ak ak timesi numerator no. enno nso ye two. Mbɛ nya two. Na mede one no aka two no ho. Mbɛ nya three. Na mede LCM no ahye ase. Na ma wie.
- 89 Tr. : Good. Clap for her.
- 90 Chn : [Clapping].
- 91 Tr. : Is it clear now?
- 92 Chn : Yes sir.
- 93 Tr. : Hein?
- 94 Chn : Yes sir.
- 95 Tr. : Okay, Then we are going to do eh
- 96 Int. : Ma baako nk k ye baako. Example baako nso nkaho.
- 97 Tr. : Okay, Eh, we want another example. This time we want a boy to do this example for us to see.
- 98 Tr. : [Talking together].
- 99 Chn : Somebody should try. Yes Gyapong do it for us.
- 100 Tr. : [Talking together].
- 101 Gyapong: Na ye denominator no ye mmeinuu. Nti mbe yi baako de aye LCM. Na mede first fraction no denominator no ak kye LCM no na ma nya one. Na mede atimesi numerator no na ma nya one. Na mede me plus sign no ahye h. Na mak second fraction. Na mede ne second fraction denominator nso ak kye LCM no. Na ma nya one. Na mede atimesi two, na ma nya two. Na maka one no ne two no abom na ma nya three. Na ma asane aseɛ na mede LCM no ak hye aseɛ. Na ma wie.
- 102 Tr. : Thank you clap for him.
- 103 Chn. : [Clapping].
- 104 Tr. : We shall work the last one before we come to do it individually. [Writes on the bb]
- 105 Chn : [Watch.]
- 106 Tr. : Yes Dufie do it for us.
- 107 Dufie : Denominator no ye ade koro nti mbe yi baako aye LCM. Na maba first fraction no. Na mafa denominator no ak kye LCM no. Na ma nya one. Na,
- 108 Tr. : The denominator is. What number is the denominator?
- 109 Dufie : Four.
- 110 Tr. : Four, you can mention that. Go on.
- 111 Dufie : Na mede ak timesi LCM na ma nya one. Na mede ak kye LCM na ma nya one. Na mede one no ak timesi LCM na ma nya one. Na mede ahye h. Na mede plus no aba. Na maba second fraction. Na ma be fa denominator no ak kye LCM. Na manya

- 112 Tr. : Yaa eye sen?
- 113 Dufie : Ya eye four. Na manya one. Na mede one no atimesi three, na ma nya three na mede ahye h \square . Na maka one ne three no abom. Na ma nya four. Na ma san ase. Na mede LCM no ahye ase
- 114 Tr. : Thank you . Is it now understood?
- 115 Chn : Yes sir.
- 116 Tr. : Then we are going to do some exercises in our exercise books. So you take your exercise books. Put down your date before you start the work.
- 117 Chn : [Working]
- 118 Tr. : [Goes round]: Where is your date?
- 119 Chd : [Inaudible]
- 120 Tr. : You did not put down date. Put down date.
- 121 Chn. : [Working].
- 122 Tr. : Why are you adding the top numbers?
- 123 Chn : I am adding the numerators together.
- 124 Tr. : You are adding the numerators together. Thank you. It is the numerators that you add.
- 125 Chn. : [Working].
- 126 Tr. : Where is your book? Take your book and work.
- 127 Chn : [Working. Background noise from the next class].
- 128 Tr. : Where is your addition sign? Bring it ,else you get your answer wrong. You may not know how to do it again. So whenever you write bring your addition sign before you go on.
- 129 Chn : Working [noise at the background from the next class]
- 130 Tr. : Where did you go?
- 131 Chn : [Inaudible].
- 132 Tr. : You don't know where you went.
- 133 Chn : [Inaudible].
- 134 Tr. : Can't you say that I was sent?
- 135 Chn. : [Working. noise at the background from the next class]
- 136 Tr. : When you don't understand something ask. Hein? What did you do before putting down this answer?
- 137 Chn : [Inaudible].
- 138 Tr. : You have to multiply the answer by the numerator before you put it down. Is that clear?
- 139 Chn. : Yes sir.
- 140 Tr. : Hurry up.
- 141 Int. : [Another teacher's lesson at the background].
- 142 Tr. : What do you say?
- 143 Int. : [Noise from children playing around the class]
- 144 Tr. : Number three is one out of twelve plus three out of three. enno na mo ntumi nye?
- 145 Chn. : [Working].
- 146 Tr. : Any problem?
- 147 Chd. : No.

- 148 Chn : [Working].
- 149 Tr. : If you don't understand it you should ask me.
- 150 Chn : [Working].
- 151 Tr. : Is there any problem?
- 152 Chn : No.
- 153 Tr. : You divide the LCM by the denominator. So ten into
ten?
- 154 Chd : one.
- 155 Tr. : You divide ten by ten. **Sε wo de εdu kɔ ky εdu a obia
bεnya sεn?**
- 156 Chd. : **Obia nya bi.**
- 157 Tr. : **Eei! ɔnya bi? Nipa du εkyε ade du a obia bεnya
sεn?**
- 158 Chn : **Baako.**
- 159 Tr. : So I am asking you the question again. [inaudible]
- 160 Chd. : Four.
- 161 Tr. : Four. **Nti** four times one **εbyε sεn?** One times four?
- 162 Chd : Four.
- 163 Tr. : Four. **Na wo de abε hyε ha. Fa hyε hɔ**
- 164 Chn. : [Working and talking in whispers].
- 165 Tr. : And it is almost time. So hurry.
- 166 Chn : [Working]
- 167 Tr. : Have you finished?
- 168 Chd. : Anne
- 169 Tr. : have you also finished?
- 170 Chn : Yes sir
- 171 Tr. : If you have finished put your exercise book on the
table.
- 172 Chn : [Working].
- 173 Tr. : What about you. have you finished? Can you finish?
- 174 Chn : [Working.]
- 175 Int. : [Noise from children playing outside the class.]
- 176 Tr. : Sit down
- 177 Chn : [Working].
- 178 Tr. : Time is gone.
- 179 Chn : [Talking together.]
- 180 Tr. : It's time. Get ready to stop work.
- 181 Chn : [Talking together.]
- 182 Tr. : Stop work. Bring your exercise books..

Appendix 5(23) TG: Ghanaian Language

LESSON : TWENTY THREE

SCHOOL : ZONGO PRIMARY

CLASS : P3

TEACHER: " TG "

SUBJECT : GHANAIAN LANGUAGE (TWI GRAMMAR)

TOPIC : DODO KABEA /KASA

DATE : 13TH MARCH, 1996

1 Tr. : Fa hye wo **table** ase na tena ase yiye.

2 Chn. : [Talking together]

3 Tr. : $\epsilon\epsilon$ ye sua Twi kasa bia yefre no se. Dodo kabea anaa se dodo kasa. Dodo kasa anaa se dodo kabea. Se asem a yeka, yeka ema enipa beberee. Se yeka dodo kabea, dodo pii se efiri mmeinu ek. ekkyere se edoso. efiri mmeinu ek. Se, se amango. Se me kase dodo a, amango dodo ye be kano sen? eh?

4 Chn. : Beberee

5 Tr.: Aane, ye ka no beberee. Na dodo kasa. Montwe mo ho, montwe h nom.

6 Chn. : [Talking together].

7 Tr. : He! Dodo kasa, dodo kasa

8 Chn. : [Talking together]

9 Tr. : Se yeka abarimaa, abarimaa, a-ba-ri-ma, abarimaa, abarimaa. Se yeka, se ebia yeka se aberantee, se yeka aberantee. Se yeka saa a.

10 Chn. : Yes sir.

11 Tr. : Aberantee, nberantee, se yeka aberantee a na egyina h ma sen?

12 Chd. : barima.

13 Tr. : ehen, yeka aberantee a na egyina h ma sen?

14 Chd. : ebia adee a wate no fofor.

15 Tr. : enye dee watie. $\epsilon\epsilon$ aberantee me serewo $\epsilon\epsilon$ wo efa bankye ye a ew h yi mbree me? Aberantee yi me sere wo fa adee yi bere me. Se yeka dodo a aberantee no ne dodo mu ye beka no sen?

16 Chn. : [Talking together]

17 Tr. : He!

18 Chd. : Mberantee.

19 Tr. : $\epsilon\epsilon$, montie oo!, ye kasa no, ye kasa no. Se nea ye si ka nono nnye saa na ye twere no. Yese aberantee, obi, se emberantee.

20 Chn. : [Talking together]

21 Tr. : Obia nhwe ha. Aberantee kyere sen? Yeka aberantee a na ekkyere sen?

22 Chd. : Abarima.

23 Tr. : Abarima. Na aberantee kyere sen? Yeka dodo, dodo kasa yenka baakofo kasa. Dodo kasa aberantee kyere sen?

24 Chd. : Mbarimaa beberee.

25 Tr. : Aha aberantee, aberantee

- 26 Chd. : ɔ̃barima baako.
- 27 Tr. : Kyere se baako. Aberantee kyere se baako. Aberantee kyere se baako. Se yeka dodoɔ̃ a, mo beka sen?
- 28 Chn. : Mberantee.
- 29 Tr. : Woa wonim na wa pagya wo nsa. Yebeka sen?
- 30 Chn. : [Talking together].
- 31 Tr. : Yebeka sen?
- 32 Chd. : Mberantee.
- 33 Tr. : Mberantee. Yebeka sen?
- 34 Chn. : Mberantee
- 35 Tr. : Mberantee
- 36 Chn. : Mberantee
- 37 Tr. : Mberantee
- 38 Chn. : Mberantee
- 39 Tr. : Mberantee
- 40 Tr. : Mberantee, mberantee, ekwere se wɔ̃m doɔ̃so. Mberantee wɔ̃m doɔ̃so. Se yeka onipa
- 41 Chn. : [Talking together].
- 42 Tr. : Onipa enye, onipa enye, onipa enye. Ye ka dodoɔ̃ kasa yese onipa enye a, yeka sen?
- 43 Chd. : Onipa enye
- 44 Tr. : ee montie o! Montie kasa no Sedeɛ ye kano, ye kasa no enye sa enna ye twere no. Mo tie?
- 46 Chn. : Yes sir.
- 47 Tr. : Ye kasa no ye kano sedeɛ yeka. Nso se ye twere a yen ntwerɛ no enipa nye. Se onipa, montie o. Se onipa, onipa nye. Onipa gyina hɔ̃ ma baako pɛ. enti se wɔ̃m doɔ̃so a yebeka no sen?
- 48 Chd. : Onipa
- 49 Tr. : enipa, enipa ye, yen kasa a. Na nka me pese mo kano paa se nka ye twere a, nka yebe twere no sen?
- 50 Chn. : [Talking together]
- 51 Tr. : Woa wonim, wɔ̃ ka “enipa, enipa” eyɛ. Nanso se ye twere no agu ye krataa mu a, yebe twere no sen? Sen na yebe kano? Yes.
- 52 Chd. : Onipa nye.
- 53 Tr. : Sen?
- 54 Chd. : Onipa nye.
- 55 Tr. : Onipa nye. Nipa noa, na ya twere yi. Nanka wo ye aka. Na afei wo sane dane no, Sen na yebe ka?
- 56 Chd. : Nnipa nye.
- 57 Tr. : Ka bio ma me nte
- 58 Chd. : Nnipa nye.
- 59 Tr. : wose yeka no sen?
- 60 Chd. : Nnipa nye.
- 61 Tr. : Nnipa, nnipa nye. Nnipa.
- 62 Chn. : [Talking together]

- 63 Tr. : Nnipa, nye nnipa. Kyere se beberee nnipa, eto debi yeka a yese
ε nnipa eba o! Yekase ε nnipa eba oo! Na ekyere se wom ye sen?
- 64 Chn. : Bebersee
- 65 Tr. : Na wom ye sen?
- 66 Chn. : wom doaso.
- 67 Tr. : wom doaso. He hwe ma yenhwe se onipa bi eba a. Yekase
onipa bi a na ekyere se baako pe.
- 68 Chn. : [Talking together]
- 69 Tr. : Onipa bi a. Na ekyere se baako pe. Na nnipa eba. ebia me nfa no
se, ye nkwadaa dee ye ako wia amango. Na yehye h nom no, na ye
gyede se yen nkoa na ewoh. Afei yete kasa. Na yaka kyere baako se :
“Portia ko hwe ma yen hwe se nnipa eba a”. Nnipa eba a, ε sane se kasa
yete ye no nti no. Mo gyede se baakofoko wo nam a na wo kasakasa?
- 70 Chn. : No sir.
- 71 Tr. : Se nipa baako nam na wo kasa, ye kase wa ye den?
- 72 Chn. : Wa bo dam.
- 73 Chn. : [Talking together]
- 74 Tr. : Wa bo dam. Nti yebe kase. Kohwe se nnipa eba a.
Kohwe se nnipa eba a. Na yen no, nea yetaa kan ne se: Kohwe se onipa
eba a. Onipa, yenka no se “enipa”. Yeka no “nnipa”. Mese yeka no sen?
- 75 Chn. : Nnipa
- 76 Tr. : Yeka no sen?
- 77 Chn. : Nnipa
- 78 Tr. : enea hwan na ebetumi aka biribi a edoaso?
- 79 Chn. : [Talking together]
- 80 Tr. : Biribi a edoaso, hwan na ebetumi aka bi maa ya tie? Dee
edoaso, wobe ka dee baakofoko kasa
- 81 Chn. : [Talking together]
- 82 Tr. : Baakofoko kasa ka ne, ansa na yak dodo no dee no so. Dee
edikan me ka aberantee enna yeka mberantee.
- 83 Chn. : Seesei a kasa no bi woh nom a, montie,, yeka, ye Asante kasa
no, dodo eni baakofoko kasa no eye pe. Dodo eni baakofoko kasa no
eye pe. Yeka se aburoo, aburoo. enne meko afuom mak twa ma aburoo.
Meko afuom mak twa ma aburoo. Me rek afuom mak twa ma
aburoo. Aburoo, aburoo ne dodo kasa no, yenka no ‘mburoo’, anaa
‘eburoo’. Dodo kasa no ye sane ka no aburoo.
- 64 Chn. : [Talking together]
- 85 Tr. : Yee, eno ye dodo kasa, ‘Me wo akoko’. Me wo akoko.
Dodo kasa yebe ka sen?
- 86 Chn. : Me wo akoko
- 87 Tr. : ε eha, eha. Wonim a pagya wo nsa. Me wo akoko
- 88 Chn. : [Whispering and murmuring.] ‘Me wo akoko’.
- 98 Tr. : Me wo akoko . Akoko dodo kasa no wobe kano sen?
- 90 Chd. : Me wo akoko
- 91 Tr. : [Points to a child]. Wo be kano sen?

- 92 Chd. : Me wɔ ɛkokɔ
- 93 Tr. : Me wɔ ɛkokɔ, Me wɔ ɛkokɔ. Dodoɔ wobe kano sen?
- 94 Chd. : Me wɔ akokɔ
- 95 Tr. : Me maka se: 'Me wɔ akokɔ', Na dodoɔ kasa no wo be ka no sen?
- 96 Chd. : Me wɔ nkokɔ.
- 97 Tr. : Me wɔ nkokɔ, Me wɔ nkokɔ. Nkokɔ kyerɛ se edoɔso.
- 98 Chn. : [Talking together]
- 99 Tr. : Me wɔ nkokɔ, Me wɔ nkokɔ. Aeie! Akorɔmfoɔ abɛ kye me nkokɔ no nyinaa. Yen aka se akorɔmfoɔ abɛ kye ma akokɔ no nyinaa. Wo kase ma akokɔ deɛ a, na ɛkyere se baako pɛ. Na akorɔmfoɔ abɛ kye me nkokɔ no nyinaa. ɛɛ, eden bio enna ye beka a, ye beka ne baakofoɔ kasa na ye aka ne dodoɔ kasa? Hwan na wɔwɔ bi a wɔpɛ se wɔbeka ama ya tie? Baakofoɔ kasa.
- 100 Chn. : [Talking together]
- 101 Tr. : ɛhe, me tie!
- 102 Chn. : [Talking together]
- 103 Tr. : Akorɔmfoɔ abɛ sesa ma akonnwa. Ne nyinaa. akorɔmfoɔ abɛ sesa ma akonnwa no nyinaa. Akonnwa, akorɔmfoɔ, akorɔmfoɔ, akorɔmfoɔ abɛ sesa ma akonnwa.
- 104 Chn. : [Talking together]
- 105 Tr. : Akorɔmfoɔ abɛ sesa ma akonnwa no nyinaa. Se yeka dodoɔ kasa a akorɔmfoɔ, yeka no sen?
- 106 Chd. : Akorɔmfoɔ abɛ sesa ma akonnwa no nyinaa.
- 107 Tr. : Wose akorɔmfoɔ abɛ ye den?
- 108 Chn. : Abɛ sesa nkonnwa no nyinaa.
- 109 Tr. : Nkonnwa, nkonnwa no nyinaa.
- 110 Chn. : Nkonnwa no nyinaa.
- 111 Tr. : Se yeka nkonnwa, nkonnwa, ɛkyere se dodoɔ, ne nyinaa.
- 112 Tr. : Wie no eyɛ Akwapim. Akwapim no eno.
- 113 Int. : Mm, Akwapim wahuu?
- 114 Tr. : eno nso ye Aburi enna ebiso a, se wahuu ɛhe?***
- 115 Tr. : Yɛɛ, seesei a, obi nka adeɛ a baakofoɔ kasa na yen hwe ne dodoɔ kasa na yen hwe.
- 116 Chd. : Akorɔmfoɔ abɛ sesa me gya no nyinaa.
- 117 Tr. : Akorɔmfoɔ abɛ sesa me gya no nyinaa. Nkorɔmfoɔ, nkorɔmfoɔ, eei! enne anadwo akorɔmfoɔ baaha oo! Montie, kasa no bi wɔhɔ a, ye ka ne dodoɔ enye yie. Kasa no bi wɔhɔ a, ye ka ne dodoɔ enye yie. enne anadwo yi nkorɔmfoɔ ebaa ha. Yen ka no saa. enne anadwo yi akorɔmfoɔ baa ha. ensoso sa akorɔmfoɔ no a ebaa ha nom no esane gyina hɔ ma dodoɔ. Mo ahunu deɛ meka?
- 118 Chn. : Yes sir.
- 119 Tr. : ɛhe, Ye kasa no bi wɔ hɔ a, ni ne dodoɔ kasa. Ye wɔ baakofoɔ kasa nso esane gyina hɔ ma dodoɔ kasa. enne mekɔ afuom mu na akorɔmfoɔ akɔ tu me bankye no nyinaa. Bankye, yenka nbankye.

- Ha! Yenka nbankye. Yeka bankye. Bankye egyina hɔ ma dodoɔ. Atadeɛ, yeka atadeɛ a, ne dodoɔ kasa no yɛbɛ ka sɛn?
- 120 Chn. : [Talking together]
- 120 Tr. : Wo a wonim no pagya wo nsa. Yeka atadeɛ a, ne dodoɔ kasa no yɛbɛ ka sɛn?
- 121 Chd. : Ntadeɛ
- 122 Tr. : Ntadeɛ, ntadeɛ.
- 123 Chn. : Ntadeɛ.
- 124 Tr. : Ntadeɛ ahodoɔ. Eie! wɔkɔ store paa, me se yɛbɛ di Buronya yi. Yɛ wɔ ntadeɛ ahodoɔ beberee. Yeka ntadeɛ ahodoɔ a, na ɛkyerɛ sɛ wie nko, ɛbi wɔhɔ nom a, ɛyɛ tumtum, ɛbi wɔhɔ a ɛyɛ kɔkɔɔ, ɛbi wɔhɔ a ɛyɛ fufuo, yɛsɛ ntadeɛ. Mo te asɛɛ?
- 125 Chn. : Yes sir.
- 126 Tr. : Hɛɛ, mpaboa yɛ?
- 127 Chd. : Mpaboa.
- 128 Tr. : Mohwɛ, hyɛtɛ, dodoɔ kasa no, dodoɔ kasa no, dodoɔ kasa no. Dodoɔ kasa no. Dodoɔ kasa sɛ: "/m/p/a/b/o/a/" mpaboa. Mpaboa. Dodoɔ ɛyɛ mpaboa. ɛnna baakofoɔ kasa nso ɛyɛ mpaboa. Mekɔ akɔtɔ mpaboa.
- 129 Chn. : [Talking together]
- 130 Tr. : Mo nim deɛ ntiara mpaboa no ɛni dodoɔ ɛnna ɛni baakofoɔ kasa no? ɛsane sɛ mpaboa ɛnyɛ baako. Mpaboa yɛ baako?
- 131 Chn. : No sir.
- 132 Tr. : mpaboa ɛyɛ sɛn?
- 133 Chn. : Mmeinu.
- 134 Tr. : ɛwɔ hɔ na ɛyɛ mmeinu? ɛhɛ.
- 135 Chd. : Left and right.
- 136 Tr. : Baako hyɛ bankum ɛnna baako hyɛ nifa. Nti yɛ ka bom a ɛyɛ sɛn?
- 137 Tr. + Chn. : Mmeinu.
- 138 Tr. : Nti sɛ yɛ kase mpaboa. Me wɔ mpaboa beberee. Me wɔ mpaboa beberee. Beberee deɛ na ɛkyerɛ sɛ ɛdoɔso. Wie, seesei a me hyɛ mpaboa. Eie, ɛnnɛ wɔ hyɛ mpaboa mmienɛ. Yɛ kase ɛnnɛ wɔ hyɛ mpaboa mmienɛ a na ɛkyerɛ sɛn?
- 139 Chn. : ɛɛ, mpaboa no yɛ mmienɛ
- 140 Tr. : ɛnnɛ me hyɛ mpaboa mmienɛ, anaa ɛnnɛ wɔhyɛ mpaboa mmienɛ, asɛɛ ne sɛn?
- 141 Chd. : Wɔhyɛ benkum sane hyɛ nifa.
- 142 Tr. : ɛɛ, wɔhyɛ benkum sane hyɛ nifa. ɛɛ Wɔhyɛ mpaboa mmienɛ asɛɛ ne sɛn?
- 143 Chd. : Wɔhyɛ baako anɔpa a, wɔkɔ fie a na waworɔ anaa wa sane ahyɛ foforɔ.
- 144 Tr. : Wɔhyɛ mpaboa mmienɛ, asɛɛ ne sɛn?
- 145 Chn. : Mmienɛ hyɛ benkum, mmienɛ hyɛ nifa.
- 146 Tr. : Aba! wo betumi de mpaboa mmienɛ ahyɛ benkum na wa sane de mmienɛ ahyɛ nifa? ɛɛ wɔhyɛ mpaboa mmienɛ asɛɛ ne sɛn?

- 147 Chn. : [Talking together]
 148 Tr. : Nkɔhwɛ obi anim. Wo deɛ pagya wo nsa na ka wodeɛ ma yen tie
 149 Chd. : **Left and right**
 150 Tr. : Mpaboa mmienɔ, aseɛ ne sɛn? Sɛ obi hyɛ. Sɛ yɛ kase obi hyɛ mpaboa mmienɔ a na ɛkyerɛ sɛ wɔnhyɛ mpaboa korɔ. Mahyɛ me mpaboa wie, yɛ frɛ no sɛn?
 151 Tr. + Chn. : **Shoe**
 152 Tr. : ɛnna Portia deɛ yi so yɛfrɛ no sɛn?
 153 Chn. : Mok Serwah.
 154 Tr. : Haa!
 155 Chn. : Mok Serwah.
 156 Tr. : Mok Serwah. Na ɛkyerɛ sɛ mpaboa no hyɛ me, **alright** hwan na ehyɛ charlie wotie wɔ dan mu ha?
 157 Chd. : Attaa
 158 Tr. : ɛhaa! Attaa, fa wo charlie no ɛbra. Fa charlie no bra.
 159 Attaa : [Takes charlie to teacher]
 160 Tr. : Hwɛ, monhwɛ seesei a mo sɛ me hyɛ dɛn?
 161 Chn. : **Shoe.**
 162 Tr. : Sɛ me hyɛ shoe wie na sɛ mede me nan wie hyɛ charlie wie mu a, Me nam a yɛbɛ kase me hyɛ mpaboa sɛn?
 163 Tr. + Chn : Mmienɔ.
 164 Tr. : Mmienɔ. Wo hyɛ mpaboa mmienɔ a ɛkyerɛ sɛ wo hyɛ charlie-wotie ɛwɔ bɛnkum ɛnna wo hyɛ shoe ɛwɔ nifa. enti yɛhunɔ sɛ obi hyɛ sa mpaboa no a, yɛbɛ kase wa yɛ dɛn?
 165 Chn. : [Talking together]
 166 Tr. : ɛhɛ! Yɛbɛ kase sa nipa no wayɛ dɛn?
 167 Chn. : [Talking together]
 168 Tr. : ɛnye nkwadaa kasa saa. Yɛbɛ kase
 169 Chn. : Wɔhyɛ mmienɔ Wɔhyɛ mmienɔ.
 170 Tr. : Wɔhyɛ mmienɔ. Na yɛbɛ ka sɛn?
 171 Chn. : [Talking together]
 172 Tr. : Wɔhyɛ bɛnkum ne nifa. Yɛbɛ kase sɛn?
 173 Ch : Yɛbɛ kase wa bɔ dam
 174 Tr. : Yɛbɛ kase wa bɔ dam. Me, sɛ me kɔ hyɛ **shoe** wie na me sane hyɛ charlie-wotie na me ba a, yɛ bɛ kase **teacher** ayɛ dɛn?
 175 Chn. : Wa bɔ dam.
 176 Tr. : ɛnne deɛ tikya abɔ dam. **Shoe** na ehyɛ no ɛnna charlie-wotie nso hyɛ no. Nti wo hyɛ mpaboa mmienɔ. Na sɛ me hyɛ wie nkoa, ɛnso yɛfrɛ no mpaboa. Mote aseɛ
 177 Chn. : **Yes sir**
 178 Tr. : ɛhɛ!
 179 Chn. : **Yes sir**
 180 Tr. : Yɛ kasa no ɛnye nyinaa na yetumi ka dodoɔ kasa
 181 Chn. : [Talking together]

- 182 Tr. : mo ma yen hye foforɔ bio. Mekɔ afuom, mekɔ afuom.
Merekɔ afuom. Afuom dodoɔ kabea anka ye be ka no sen?
- 183 Chn. : Mekɔ afuom
- 184 Tr. : Nka yebɛ kano sen?
- 185 Chd. : Nfuom.
- 186 Tr. : Nfuom. Wadɔ nfuom beberee. Afe yi wadɔɔ nfuom
- 187 Chn. : [Talking together]
- 188 Tr. : Nfuom. First, yeka no afuo, afuo, nfuɔ. Eie wodeɛ wobɛ wuo.
Afe yi yese wadɔɔ nfuɔ beberee. Wa ye den?
- 189 Tr. + Chn : Wadɔɔ nfuɔ beberee. Eie, na wo, afe yi, na wo ye den? Afe
yi, na me deɛ me ni ahɔden. Nti me dɔɔ sen? Afuom baako. Me dɔɔ afuo
baako. Na wosoɛ? Eie, medeɛ afe yi me ye den? Me dɔɔ nfuom beberee Mo
ahunu nsosoɛ a eɔa etamu?
- 190 Chn. : **Yes sir.**
- 191 Tr. : Nfuom kyere sɛ dodoɔ. enna afuom kyere baako
- 192 Chn. : [Talking together]
- 193 Tr. : ɛɛ, na afe yi. Deɛ yede kɔ nsuo no yefre no sen? Deɛ yede kɔ
nsuo no yefre no sen? Mo ndwene ho paa. Deɛ tete hɔnom yede kɔ nsuo no
yefre no sen? Deɛ tete na yede kɔ nsuo yefre no sen? Yefre no sen?
- 194 Chd. : Atam.
- 195 Tr. : Atam. Yefre no sen?
- 196 Chd. : **Bucket**
- 197 Tr. : enye tete **bucket**. Yefre no sen?
- 198 Chd. : **Bucket**
- 200 Tr. : Aha, aha. Yefre no sen?
- 201 Chd. : ehina.
- 202 Tr. : ehina. Mo mmɔ mo nsam ma no.
- 203 Chn. : [Clapping].
- 203 Tr. : ehina. Hwan ne na enim ehina?
- 204 Chn. : Yede kɔ nsuo
- 205 Tr. : eyɛ. Yede den na eyɛ ahina?
- 206 Chn. : Yede **clay**
- 207 Tr. : Yede den na eyɛ?
- 208 Chd. : Yede eɔɔteɛ
- 209 Tr. : Yede, na me nim sɛ wɔse yede dɔteɛ. Wɔse yede eɔden?
- 210 Chn. : eɔɔteɛ
- 211 Tr. : Yenka no saa.
- 212 Chn. : Yenka no saa, yeka no sɛ ndɔteɛ.
- 213 Tr. : Yefre no dɔteɛ. Mese yefre no sen?
- 214 Chn. : Dɔteɛ
- 215 Tr. : Dɔteɛ
- 216 Chn. : Dɔteɛ
- 217 Tr. : ehina no so yefre no sen?
- 218 Chn. [Talking together]
- 219 Tr. : Su-hina, su-hina, su-hina.

- 220 Chn. : Su-hina.
- 221 Tr. : Su-hina.
- 222 Chn. : Su-hina
- 223 Tr. : Se su-hina nono, Asante kasa no anka yebeka no se: "nsuo ahina", enna yatwa nsuo no afiri hɔnom. Se woka ye no, 'nsuo ahina', na ekwere se, aye te se kasa noa wo woka no wonte asee.
- 224 Chn. : Mm
- 225 Tr. : Wote asee? Nti yese su-hina. Me su-hina baako pe nso abɔ. Me su-hina baako pe nso abɔ. Mote asee?
- 226 Chn. : **Yes sir.**
- 227 Tr. : Nti dodoɔ kabea no yeka su-hina anka wo beka no sen? Dodoɔ kabea. Su-hina anka wo beka no sen? Woa wonim no pagya wo nsa.
- 228 Chn. : Nsu-hina.
- 229 Tr. : Nsu-hina. Nsu-hina, nsu-hina, nsu-hina, nsu-hina, nsu-hina, nsu-hina. Mo ahunu. Nsu-hina. ekwere se edoɔso. Nsu-hina edoɔso. Su-hina eye baako. Su-hina eye baako. Nsu-hina edoɔso. Me nsu-hina nyinaa abobɔ. Me nsu-hina nyinaa abobɔ. Se motee asee?
- 230 Chn. : **Yes sir.**
- 231 Tr. : ekwere se nkwadaa no baye no, ennoɔmaa wɔnom mu nsuo nyinaa wɔm abobɔ no. Dodoɔ kasa nono. Na eyi ye? Se yeba fie a
- 232 Chn. : [Talking together]
- 233 Tr. : kete, kete. Hwan na wɔnim kete? Kete yeye no den?
- 234 Chn. : [Talking together]
- 235 Tr. : Ha! Kete yeye no den?
- 236 Chn. : Da so
- 237 Tr. : Ye da kete so. Ye da kete so Se ye nea ye wɔ dan ne ha nyinaa, yebe tumi ada kete baako so?
- 238 Chn. : **No Sir.**
- 239 Tr. : Yebe da kete sen?
- 240 Tr. + Chn. : Beberree.
- 241 Tr. : enea, na kete no se ye kɔɔ beberee a, ye suuma obi se wɔn nkɔ nkɔ kete a yebe kano sen?
- 242 Chn. : Nkete.
- 243 Tr. : Ha? Yebe ka sen?
- 244 Chn. : Nkete.
- 245 Tr. : nkete, nkete. Hum yiedee nkete na wa kɔ sesa abɔ wobu sie? Wo ntimi nka se kete na wa kɔ fa abɔ wobu sie. Nkete
- 246 Chn. : [Talking together]
- 247 Tr. : Nkete, na nkete no eye a na ye sane ka biribi ekaho. Hwan na ebetumi ahunu kete dee eye a yeka ekaho?
- 248 Chn. : [Counting]
- 249 Tr. : Nkete, eye a na yeka biribi ekaho.
- 250 Chd. : Sumiie
- 251 Tr. : ehe, nkete, nkete, ya yedidi watem a, yeka nkete biribi kaho ema ne ye wo yaa. **Yes.**

- 252 Chd. : Dwonsɔkrobo.
- 253 Tr. : Aha. **Yes**
- 254 Chd. : [Inaudible].
- 255 Tr. : ehe, ehe, ehe
- 256 Chd. : eno nso eye dwonsɔkrobo?
- 257 Tr. : ehe, dabi. enye ne saa ho. Me, meka a, mo a ewɔ motiri mu. enso mope se mobe paga mo nsa mobe ka. Na emom se me ka a, mo bebɔ mo nsam ama me.
- 258 Chn. : **Yes sir.**
- 259 Tr. : ehe, ka ma me ntie
- 260 Chd. : [Inaudible].
- 261 Tr. : eha
- 262 Chn. : [Talking together]
- 263 Tr. : Nketekyire
- 264 Chn. : [Clapping]
- 265 Tr. : Nketekyire, anaa monte da?
- 266 Chn. : Yate
- 267 Tr. : Aden nti na eye a na yeka nketekyire?
- 268 Chn. : [Talking together]
- 269 Tr. : Nketekyire ye den nea? ehe. Nketekyire ye den nea? **Yes.**
- 270 Chd. : Aboa.
- 271 Tr. : ehe. Nye nketekyire wɔm hyehye bɔne mu. Yeka nketekyire, hum. Se, mm hum nketekyire ye den?
- 272 Chd. : yeka beberee
- 273 Tr. : Se mo dwonsɔ gugu nkete so na se etete a na adekye na wo, egu dane mu na won hataa ye a wo maame kakyere wo se, 'Kɔ yiye wo nketekyire no na kɔ hata'. Kɔ yiye wo nketekyire no. Wo dee watwetwa kete nyinaa mu. nti se kete no etete a, yefre no kete kyire. Kɔ yiye dwonsɔ nkrobo kete no. Yese nketekyire, nketekyire. Kete nkete akyire, ekyire nse nkete papa no na akyi nea eye no yefre no nketekyire. Nkete kyire. Mote asee?
- 274 Chn. : **Yes sir**
- 275 Tr. : He ee den bio enna ne dodoɔ kasa no ee yeka no baako? Yeka kasa no baako. Dodoɔ kasa no yeka, enye dodoɔ kasa, yeka a, yeka no baako pe. ehe.
- 276 Chd. : Mankani
- 277 Tr. : Wose mankani?
- 278 Chn. : [Talking together]
- 279 Tr. : Mankani, mankani, mankani ne dodoɔ ye kano sen?
- 280 Chn. : [Talking together]
- 281 Chd. : Nmankani
- 282 Tr. : Heen!
- 283 Chd. : Nmankani
- 284 Tr. : Mankani ne , enoa nono. Ne dodoɔ kasa noa ne mankani
- 285 Chn. : [Talking together]

- 286 Tr. : Mankani ɛɛ sɛ yɛka, kasa bi wɔhɔnom a, kasa bi wɔhɔ a, a yɛka ne dodoɔ kasa no a, yɛde adeɛ a ɛwo mu no ɛnna ɛka. Me kɔ afuom mu no me tu mankani kɛntɛn mmienɔ. Me tu mankani nkɛntɛn mmienɔ. Sɛ mo ahunu. Mankani no, nkɛntɛn, nkɛntɛn, nkɛntɛn mmienɔ. Borɔdeɛ ɛduro mmienɔ. Yɛn nka nborɔdeɛ. Yɛka borɔdeɛ, borɔdeɛ ɛduro mmienɔ.
- 287 Chn. : Yɛn ka nbɔdeɛ.
- 288 Tr. : Borɔdeɛ ɛnyɛɛ bɔdeɛ
- 289 Chn. : Bɔdeɛ
- 290 Tr. : Dodoɔ kasa no ɛbi wɔhɔnom a, yɛn nka ndi kasa no anim. yɛn nka ndi kasa no anim. Montie. Dodoɔ kasa no ɛbi wɔhɔnom a, yɛn nka ndi kasa. ɛbia yɛka a na ɛwɔ kasa no mfifini
- 291 Chn. : [Talking together]
- 292 Tr. : ɛkyina, ɔkyina, ɔkyina mɛkɔ Kumasi, ɔkyina mɛkɔ Kumasi. Me, me, me mɛkɔ Kumasi. Twi kasa yɛn twɛɛ no sie. ɔkyina me mɛkɔ Kumasi. ɛnti sɛ wo kase, ɔkyina wo bɛkɔ Kumasi a, dodoɔ kasa no wobɛ kano sɛn? Dodoɔ kasa no.
- 293 Chd. : kɔ akyire. ɔkyina mmɛkɔ Kumasi
- 294 Tr. : Mhum ɔkyina.
- 295 Chd. : ɔkyina mmɛkɔ Kumasi.
- 296 Chn. : [Laughter]
- 297 Tr. : Yes
- 298 Chd. : ɔkyina mmɛ kɔ Kumasi
- 299 Tr. : Yes
- 300 Chd. : ɔkyina yɛbɛ kɔ Kumasi
- 301 Tr. : Kano yiye ma yɛnti
- 302 Chd. : ɔkyina yɛbɛ kɔ Kumasi
- 303 Tr. : Mo ahunu? Mo mmɔ mo nsam ma no
- 304 Chn. : [Clapping]
- 305 Tr. : ɛkyina yɛbɛkɔ. Yɛbɛkɔ, yɛbɛkɔ yɛ kyirɛ sɛ yɛn. Na yɛnka no, 'yɛn bɛ kɔ' Kumasi. ɔkyina yɛbɛ kɔ Kumasi. Yɛn a yɛ wɔha nyinaa bɛkɔ Kumasi. Mo ahunu Asante kasa?
- 306 Chn. : Yes sir
- 307 Tr. : Yɛbɛkɔ Kumasi ankɔdi kasa no anim ɛba mfifi. ɔkyina yɛbɛkɔ Kumasi
- 308 Chn. : [Talking together]
- 309 Tr. : Kwaku akum anomaa, Kwaku akum anomaa. dodoɔ kasa nono. Mo ahunu deɛ ɛdikan no. ɔkyina mɛkɔ Kumasi. ɛkyina ɛni dodoɔ kasa. 'Nkyina' yɛn nka 'nkyina'. ɛnna Kumasi nsoso yɛnɛ dodoɔ kasa Kumasi [32 Min 30 sec].

Appendix 5 (24) TG: Science

LESSON : TWENTY FOUR
 SCHOOL : ZONGO PRIMARY
 CLASS : P3
 TEACHER : "TG"
 SUBJECT : ELEMENTARY SCIENCE
 TOPIC : BεBIA MMOA TEε
 DATE : 12TH MARCH, 1996

- 1 Tr. : enano ye sua mmoa ho asem. Hwan na ebetumi akyere me ade koraa ye sua ye a efa mmoa ho?
- 2 Chn. : [Talking together]
- 3 Tr. : ehe
- 4 Chd. : Awo
- 5 Tr. : Awo. W se eden?
- 6 Chn. : Awo. Yesua ekwanea emmoa efa wo. Yesua ekwanea emmoa efa wo. Yehu se mmoa a w m nan ye enan no, sen na w m fa enya nkwadaa nketewaa? W m a w m nan, w m nan, w m nan enan no so. Sen enna w m efa ewo? Anaa se sen enna w m fa enya nkwadaa nketewaa? Boakye
- 7 Boakye : W m to nkosua.
- 8 Chn. : eee!
- 9 Tr. : W m a w m nam, w m nan eye enan no w m to nkosua?
- 10 Chn. : [Laughing]. No sir
- 11 Tr. : eye. W m ye den?
- 12 Chd. : W no mo nyem
- 13 Tr. : W m nyem, w m nyem. W m nyem fa he?
- 14 Chd. : W m yem
- 15 Tr. : W m nyem w m yem. Na ekyere se w m a w m nan eye enan no a ebi ne edwan no, anaa abirekyie anaa se nipa no sen na w m fa nya ketewaa?
- 16 Chd. : W ewo
- 17 Tr. : W ewo. enipa ewo. Odwan ewo. Onipa w ewo. Odwan nso ewo. kra ewo. W m a w m enan eye enan no nyinaa w m ewo. enne na aboa w no wia dee w ye den? W yeden?
- 18 Chd. : W to kosua.
- 19 Tr. : W to kosua. Aboa w wia ebiara eto kosua. Akyekyede w ye den?
- 20 Chd. : W to kosua.
- 21 Tr. : W to kosua. Denkyem nso yeden?
- 22 Chd. : W to kosua.
- 23 Tr. : emmoa w m to kosua no ebi ne dee wo he?
- 24 Chd. : Kotere.
- 25 Tr. : Me nbisa wo hwee.

- 26 Chn. : Sir, sir, sir
- 27 Tr. : [Points to child]
- 28 Chd. : Onini
- 29 Tr. : Onini. seesei a mmoa wɔm wia enna yɛka. Yɛn nka wɔm a wɔm wia bio. Aboa wɔto kosua ɛbi ne deɛ ɛwɔ he?
- 30 Chd. : Akokɔ.
- 31 Tr. : Akokɔ. [Points to a child]
- 32 Chd. : Odwan
- 33 Tr. : Eie! Odwan to kosua! [Points to a child]
- 34 Chd. : Kotere
- 35 Tr. : Aha yɛn ka kotere bio [Points to a child]
- 36 Chd. : Akokohwedee
- 37 Tr. : Akokohwedee, ennee na ɛkyere se mmoa wɔm to kosua no no a wɔm enye mmoa wɔm enan eye enan no yefre wɔm sen?
- 38 Chd. : Anomaa.
- 39 Tr. : ennoma anaa se sen?
- 40 Chd. : **Birds**
- 41 Tr. : Aha, **birds** ye deɛ, nanso sen?
- 42 Chd. : Abuburo
- 43 Tr. : enye abuburo. Yefre wɔm ntakraboaa. Mese yefre wɔm seen?
- 44 Chn. : Ntakraboaa
- 45 Tr. : Ntakraboaa bia to kosua. Aboa bia wɔwɔ ntakra bia to kosua. Amampani eni ntakra, nakwase eni ntakra enna ɔha nanso wɔm tu. enti saa mmoa no nso wɔm yeden?
- 46 Chd. : Wɔm to kosua
- 47 Tr. : Wɔm yeden?
- 48 Chd. : Wɔm ewo.
- 49 Tr. : Hwe! Yahunu emmoa wɔm ewo. emmoa no bi wɔhɔnom a wɔm nsoso wɔm nto kosua, wɔm enante enan enan so. Wɔm nsoso ewo. emmoa no bi ne deɛ ɛwɔ he?
- 50 Chd. : Adwene
- 51 Tr. : Adwene ɛdeben bio?
- 52 Chd. : ɔwɔ
- 53 Tr. : ɔwɔ
- 54 Chd. : Kɔɔ
- 55 Tr. : Kɔɔ. Saa mmoa wie sie nom no, wɔnom, wɔm wia, nso wɔm to kosua. ennee na aponkyerene nsoso yeden? Aponkyerene ye den?
- 56 Chd. : Wɔ hurihuri.
- 57 Tr. : Aponkyerene ye den?
- 58 Chd. : Wɔto kosua.
- 59 Tr. : Wɔto kosua. Yee, yahunu emmoa wie sie nyinaa enipa ewo, odwan ewo wɔ nto kosua. Akokɔ to kosua, ɛɛ akyekyede to kosua. ennee na mmoa nketekete nsoso wɔm yeden? Mmoa nketekete no ɛbi ne deɛ ɛwɔ he?

- 60 Chd. : Nwansena
- 61 Tr. : Nwansena wɔm nso wɔm ye edeen?
- 62 Chd. : ebi ne kakape
- 63 Tr. : Nwansena yeden? Nwansena yeden?
- 64 Chd. : Kosua
- 65 Tr. : Nwansena to Kosua. Nwansena to Kosua. ee, Nwansena no Kosua no a wɔto no ee, eho wɔ akyinnye kakra. Aboa bi tese nwansenpobire wɔ ye nwansena. ee, hwan na akɔ duaso ahunu nwansenpobire da? ehe
- 66 Chd. : Wɔ ewo mmoa nketenkete.
- 67 Tr. : ee, yoo, enti dee wo
- 68 Int. : [Inaudible]
- 69 Tr. : Maame kɔ office na fa adee kata so. Nwansenpobire ɔye aboa a ne borɔfo mu yefre no insect. **Insects** nyinaa eye a wɔm to kosua. Na nwansenpobire no ne kosua to no, te se nea wie ekano, se wokɔ duaso a wo hunu se nwansenpobire be siso a, na wato agu so. Ne to no, wɔto gu so a, wobe hunu se ne ba no wɔm nam. Hwan na ahwe da? Mo ahunu.
- 70 Chn. : **Yes sir**
- 71 Tr. : ehe, eye adee a eye nwanwa. ekyire mbe kyere mo dee ntia ete saa. esane se, se wokɔ duaso wo wura mu a, wodee wobe hunu se, nwansenpobire ba hɔ nom a wobe hunu se wato atoso. Woto to soa, na aboa no, se ebe ye se edu na wobe toa, ɔhɔ ara na wɔm nam so tese ee akɔkono nketenkete. Mo ahunu?
- 72 Chn. : **Yes sir**
- 73 Tr. : Wɔm tese tiafi mo mmoa. Saa. Akyire yebe sua. yebe hwe se eno ye nkosua anna se ne mma a wa awo wɔm. enne dee yeye se ye dwene ho pa, ene bebia, saa enneema a ya keka yi nyinaa, emmoa no nyinaa bebia wɔm tee. Bebia wɔm tee. M'fitiasae afiri adwene nom so. Adwene ehe na adwene tee? Wonim a pagya wo nsa. me pe **sir, sir** ebia.
- 74 Chn. : **Sir, sir**
- 75 Tr. : eha wo kase **sir** a me ntie. Adwene wɔ te he?
- 76 Chd. : Nsuom
- 77 Tr. : Wɔte nsuom, wɔte nsuom. Denkyem te he?
- 78 Chd. : Nsuom
- 79 Tr. : Wose wɔte nsuom. Denkyem wɔte he?
- 80 Chd. : Wɔte kuko so ete nsuom.
- 81 Tr. : Wɔte kuko mu ete nsuom. Wɔse denkyem te fa he?
- 82 Chn. : Kuko so te nsuom
- 83 Tr. : Saa mmoa no a wɔm te kuko so esane ete nsuom mu no ne borɔfo yefre no **amphibians**. Mese ye fre wɔm sen?
- 85 Chn. : **Amphibians**
- 86 Tr. : **Amphibians**. ennee se denkyem eye **amphibian** a, aboa ben bio enna wɔ no nsoso eye **amphibian**?
- 87 Chd. : Kɔto

- 88 Tr. : Kɔɔ, wose kɔɔ eye **amphibian**. Yese wɔte nsuom enna wɔte kukoɔ so, enti kɔɔ wɔte he?
- 89 Chd. : Wɔte ebɔne mu
- 90 Tr. : Wɔte he?
- 91 Chd. : Wɔte aforɔ mu
- 92 Chn. : Wɔte nsuom
- 93 Tr. : Wɔte nsuom. Yese aboa wɔ ye **amphibian** na wɔte kukoɔ mu na wɔ sane te nsuo mu. Yate se denkyem, na aboa ben bio?
- 94 Chd. : Onini.
- 95 Tr. : Onini! Onini dee wɔ nti nsuom. Aboa ben bio? Aka aboa baako. ehe.
- 96 Chd. : Adwene
- 97 Tr. : Adwene. Aboa ben nea?
- 98 Chd. : Adwene
- 99 Tr. : Aboa ben nea? Aboa ben?
- 100 Chd. : Aponkyerene
- 101 Tr. : Aponkyerene. Mo mmɔ mo nsam emma no
- 102 Chn. : [Clapping]
- 103 Tr. : Aponkyerene nso ye **amphibian**. Wɔte nsuo mu enna wɔ sane te kukoɔ so. Anaa mo nhunu saa?
- 104 Chn. : Ye ahunu saa
- 105 Tr. : Hwan na ahunu aponkyerene a wɔte nsuo mu da?
- 106 Chn. : [Raise hands up]
- 107 Tr. : Na hwan na ahunu aponkyerene a wɔte kukoɔ so da?
- 108 Chn. : [Raise hands up]
- 109 Tr. : ekyire se moa mo nsa wɔ soro noa kyere se aponkyerene te nsuo mu nso sane te kukoɔ so, me boa?
- 110 Chn. : **Yes sir**
- 111 Tr. : Mo mfa monsa ntohɔ. Yee enneɛ na yahunu se nsuo mu mmoa no nyinaa no wɔm te nsuo mu. Adwene mo te nsuo mu, me boa?
- 112 Chn. : **Yes sir**
- 113 Tr. : Wee, enneɛ na afafantɔ nso te he?
- 114 Chd. : Wɔte wira mu
- 115 Tr. : Afafantɔ wɔte he?
- 116 Chd. : Wɔte nwira mu
- 117 Tr. : Wɔte wira mu. Yoo afafantɔ te he?
- 118 Chd. : Wɔte fie
- 119 Chn. : [Laughter]
- 120 Tr. : Afafantɔ wɔte he?
- 121 Chd. : Wɔte kukoɔ so
- 122 Tr. : Wɔte kukoɔ so. Dabi. Se wo kase kukoɔ so dee a se, se wonte wira mu a na wote fie. Wɔte he?
- 123 Chd. : Wɔte wira mu.

- 124 Tr. : Wɔte wira mu. ɛɛ, na ɛkyere sɛ mmoa, saa mmoa yɛfrɛ
wɔm insects no nyinaa no wɔm te wira mu, me boa? **Alright.** Akɛtekyire
wɔte fa he? Wɔte he?
- 125 Chd. : Wɔte bɔne mu
- 126 Tr. : Wɔte bɔne mu. Wose wɔhyɛ he?
- 127 Chd. : ɛbɔne mu
- 128 Tr. : ɛbɔne mu. ennee na kɔtɔ nso ne fie ne he?
- 129 Chd. : ɛbɔne mu
- 130 Tr. : Kano kese ma obia ntie. Kɔtɔ wɔte he?
- 131 Chd. : ɛbɔne mu.
- 132 Tr. : ɛbɔne mu wɔ fa he?
- 133 Chd. : Aforɔ mu
- 134 Tr. : Aforɔ mu fa he?
- 135 Chd. : Nsuo mu
- 136 Tr. : Nsuo mu. ɛɛ yahunu sɛ emmoa no a wɔm ɛdware nsuo no
nyinaa wɔm te nsuo mu. ennee na ntakraboaa nsoso wɔm fie ne he?
- 137 Chd. : ɛwira mu
- 138 Tr. : Nwira mu?
- 139 Chd. : ɛdua so.
- 140 Tr. : Wɔse ntakraboaa te he?
- 141 Chn. : ɛdua so.
- 142 Tr. : Yete dua so. ɛɛ ntakraboaa nyinaa na ete dua so?
- 143 Chn. : **No sir. Sir, sir**
- 144 Tr. : ɛhɛ
- 145 Chd. : ɛbi te fie
- 146 Tr. : Wɔm no a wɔm te fie no ɛbi ne deɛ ɛwɔ he?
- 147 Chd. : Akokɔ, dabodabo
- 148 Tr. : Adɛn wope sɛ wo ka sɛn?
- 149 Chn. : [Laughing]
- 150 Tr. : ɛhɛ
- 160 Chd. : Akokɔ
- 161 Tr. : Kokɔ. Rebecca.
- 162 Rebecca : Dabodabo.
- 163 Tr. : Dabodabo. Wɛɛ ɛye, ɛ ya wieɛ ɛno. Nso emmoa wɔm to
kosua no a wɔm ɛnan ye ɛnan no a yɛfrɛ wɔm **reptiles** ennora me bɔ wɔm
din. **Reptiles** noenso wɔm nsoso ɛhene na wɔm tee? Wobɔ ndin a, na wa
kyere bebɛia wɔtes. Wobɔ ndin a, na wa kyere bebɛia wɔtes. ɛhɛ.
- 164 Chd. : Pete
- 165 Tr. : ɔpete! Pete ye deɛn a? Pete ye deɛn?
- 166 Chn. : [Laughing] **Sir, sir**
- 167 Tr. : ɛhɛ
- 168 Chd. : Pete
- 169 Tr. : ɛhɛ
- 170 Chd. : Aboa
- 171 Tr. : Pete ye deɛn?

- 172 Chd. : Ntakrabo
- 173 Tr. : Petε ye den?
- 174 Chd. : Ntakrabo
- 175 Tr. : Petε ye den?
- 176 Chd. : W▷ ye anene
- 177 Tr. : Aee! petε ye anene.
- 178 Chn. : [Laughing]
- 179 Tr. : Petε ye dεben?
- 180 Chd. : Anomaa
- 181 Tr. : W▷ye anomaa. W▷se petε ye ben?
- 182 Chn. : Anomaa
- 183 Tr. : Anomaa, na wie deε yenka eno. Petε eyε, ne nan ye enan?
- 184 Chn. : **No sir.**
- 185 Tr. : Petε ye dεben?
- 186 Chn. : W▷ tu.
- 187 Tr. : W▷ tu. Na aboa ne nan ye enan w▷ tu?
- 188 Chn. : **No sir.**
- 189 Tr. : Woboa, aboa bi ne nan ye enan w▷ tu. Aboa ben a?
- 190 Chd. : Akok▷
- 200 Tr. : [Laughing] Akok▷ w▷ tu?
- 201 Chd. : Akok▷
- 202 Chn. : [Laughing]
- 203 Chd. : Ohuam.
- 204 Tr. : Ohuam, ne nan ye enan nso w▷ tu. εε saa emmoa wie nom sei a ye ka no, ye se bεεbia w▷tee. wob▷ ndin a wose aboa wie w▷ te ha. Wob▷ ndin a, na wa kyere bεbia w▷tee. εhe aboa ben?
- 205 Chd. : W▷te wira mu
- 206 Tr. : Aboa ben nea? εnye nea w▷te wira mu. Mese aboa ne nan ye enan a w▷to kosua. εhe
- 207 Chd. : Kotere
- 208 Tr. : W▷te he?
- 209 Chn. : W▷te b▷ne mu
- 210 Tr. : εhe aboa ben?
- 211 Chd. : Akyekyedee
- 212 Tr. : Kano kese
- 213 Chd. : Akyekyedee
- 214 Tr. : w▷te he?
- 215 Chd. : Nwiram
- 216 Tr. : Nwiram fa he na akyekyedee tee? W▷te he?
- 217 Chd. : Nkwadu mu
- 218 Tr. : Nkwadu mu ? [laughing] εhe εhe w▷te he?
- 219 Chd. : Abε ase.
- 220 Tr. : Abε ase. εhe w▷te he?
- 221 Chd. : Kwaeε mu.
- 222 Tr. : Kwaeε mu. Mepε ne fie a w▷tee εε **Yes.**

- 223 Chd. : Dua ase.
- 224 Tr. : Dua ase, dua ase fa he? ehe
- 225 Chd. : Dua adukuro mu.
- 226 Tr. : Dua adukuro mu. Obia wɔ bebia wɔte oo! Obia. Yahunu se kɔtɔ wɔte nsuo mu kora wote bɔne mu. Kɔtɔ wɔ hye nsuo mu a wɔte bɔne mu. enna anomaa nsoso, wo no nsoso wɔte dua so. Obia wɔ ne bebia wɔtee. Mo ahunu anaa?
- 227 Chn. : Yes sir.
- 228 Tr. : enna aboa yefre no se **amphibian** wɔte nsuo mu esane te kukoɔ so. Ye ka se apɔnkyerene ye **amphibian**. Denkyem eye **amphibian**. Wɔte nsuo mu wɔ sane te kukoɔ so. enna yahunu se emmoa wɔm wia no nsoso no, ebi ete efa he? enna yahunu se ebi te bɔne mu. ebi te bɔne mu. enna ebi nsoso ete mu. Dee wɔte adukuro mu no edin de sen?
- 229 Chn. : [Talking together].
- 230 Tr. : Akyekyede. ennee yeba emmoa wɔm enan ye enan a wɔm ewo no nsoso, wɔm ewo.
- 231 Chd. : Odwan
- 232 Tr. : Odwan, odwan wɔte he?
- 233 Chn. : [Talking together]
- 234 Tr. : Odwan te he?
- 235 Chd. : efie.
- 236 Tr. : Odwan te he?
- 237 Chd. : ebuo mu.
- 238 Tr. : ebuo mu ehe?
- 239 Chn. : Wɔte fie.
- 240 Tr. : ee se wɔte fie koraa, wɔte fie a, wɔwɔ bebia wɔtee. ennee na wɔm aka no nsoso te he?
- 241 Chd. : ebuo mu.
- 242 Tr. : Dee ne nan ye enan a wɔ ewo no? Wɔte bɔne mu? Wɔte bɔne mu? Dee ewɔ he na ete bɔne mu? Dee ne nan ye enan a wɔ ewo no? Dee ewɔ he enna ete bɔne mu?
- 243 Chd. : ebi te nwiram.
- 244 Tr. : Aha, yen wiece
- 245 Chd. : Kraman wɔ da veranda mu.
- 246 Tr. : Dabi, dabi. Yese dee ne nan ye enan a wɔ ewo no yese ebi te ebɔne mu. Mese dee wɔte ebɔne mu no, ebi ne dee ewɔ he?
- 247 Chd. : Akyekyede.
- 248 Tr. : ebi ne dee ewɔ he?
- 249 Chd. : Oपुरo.
- 250 Tr. : ee wɔse opuro. ebi ne dee ewɔ he?
- 251 Chd. : Nantwie.
- 252 Tr. : Ah! nantwie ete bɔne mu?
- 253 Chd. : Kusie.
- 254 Tr. : Kusie, kusie
- 255 Chd. : kɔtɔ.

- 256 Chd. : Akura.
 257 Tr. : Akura.
 258 Chd. : Amokua.
 259 Tr. : Amokua.
 260 Chd. : Akrantee.
 261 Tr. : Akrantee.
 262 Chn. : [Talking together]
 263 Tr. : emmoa wɔm ɛnan ye ɛnan no a wɔm ɛwo. Kusie ne nan ye ɛnan, wɔ ɛwo. Wɔte bɔne mu. Wɔ nea, ɛna ɛto ne dan. Sen na kusie si ne dan? Sen?
 264 Chd. : Wɔde na ano na etu tokoro.
 265 Tr. : Wɔ yɛɛn?
 266 Chd. : Wɔde ne mmɔwere tweretwere fam.
 267 Tr. : ɛhe
 268 Chd. : Wɔde ne mmɔwere na etu bɔne.
 269 Tr. : Wɔde ne mmɔwere na wɔtu bɔne. Wɔtu bɔne a na wa kɔ da mu. ɛnee, ɔyow nsoso. Sen na ɔyow nso fa si ne fie? ɔyow wɔ da he?
 270 Chd. : Wɔda bɔne mu
 271 Tr. : ɔyow wɔ da he?
 272 Chd. : Wɔda wira mu.
 273 Tr. : ɛwira mu? Wira mu fa he?
 274 Chd. : ɛfie.
 275 Tr. : ɛfie? Wonim ɔyow?
 276 Chd. **Yes sir.**
 277 Tr. : ɔyow wɔte sen?
 278 Chd. : Wɔso, wɔye tumtum ɛna na apampam ye kɔkɔ.
 279 Tr. : Se wɔye tumtum ɛna na apampam ye kɔkɔ a, se na pampam mu ye kɔkɔ a. Se wo ɛkyere ɔyow akwere obi a oni noa, wobe kase wote sen?
 280 Chd. : [Quiet]
 281 Tr. : Anka mbe kase ɔyow te se abirekyie. ɔyow wɔte se abirekyie, me boa?
 282 Chn. : **Yes sir.**
 283 Tr. : Na se wɔte se abirekyie a, na sen na ɔyow wɔ fa si ne dan? ɔyow sen na wɔfa si ne dan?
 284 Chd. : Wɔda mfofo mu.
 285 Tr. : Wɔhye mfofo mu. ɛnee na ɛkyere se sa mmoa no a wɔm wɔ nwira mu nyinaa obia da adukuro mu. Mese obia da he?
 286 Chn. : Adukuro mu. ɔtwe ɛda adukuro mu. Adowa ɛda adukuro mu. ɔyow da adukuro mu. Wansene ɛda adukuro mu. ɛnee na hwan na ɛda adukuro mu a wɔnso wɔ ye aboa?
 287 Chd. : ɛsono
 288 Tr. : ɛ ɛsono ɛnda adukuro mu. Hwan ne a?
 289 Chd. : Akrantee.

- 290 Tr. : Hwan ne a?
 291 Chd. : Odwan
 292 Tr. : Hwan ne a?
 293 Chd. : ɔkra.
 294 Tr. : Hwan ne a?
 295 Chd. : Gyata.
 296 Tr. : Adeɛ yei deɛ woa wobe hu yebe ɔ ye nsam ama wo. Hwan
 ne a? Hwan ne a?
 297 Chd. : Aduie
 298 Tr. : Hwan ne a?
 299 Chd. : Opuro.
 300 Tr. : Hwan ne a?
 301 Chd. : Akɛtia
 302 Tr. : Hwan ne a?
 303 Chd. : Ntontom
 304 Tr. : Hwan ne a?
 305 Chd. : Wɔwɔ
 306 Tr. : Mese wɔ no deɛ wɔnda adukuro ɛnso wɔ ɛwo
 307 Chn. : Tikya ka.
 308 Tr. : ɛnnɛ sɛ meka mo be ɔ mo nsam ama me.
 309 Chn. : **Yes sir.**
 310 Tr. : ɛne onipa.
 311 Chn. : Aa! [Clapping].
 312 Tr. : Onipa wɔ ɛwo, wɔnda adukuro mu. Onipa wɔda adukuro mu?
 313 Chn. : **No sir.**
 314 Tr. : Wɔda he?
 315 Chn. : ɛdan mu.
 316 Tr. : ɛdan mu. Sɛ wahunu sɛobia wɔ bɛbia wɔ da. Obia wɔ
 bɛbia wɔ da. ɛnnipa ɛda dan mu. Odwan da buo mu. Sɛ wahunu?
 317 Chn. : **Yes sir.**
 318 Tr. : Odwan wɔ da buo mu ɛnna kusie, akrantes, amokua, wɔm
 nso da fa he?
 319 Tr + Chn : ɛbɔn mu
 320 Tr. : ɛnna ɔtwe, ɔyow, wansene wɔm nso da he?
 321 Chn. : ɛbuo mu/adukuro mu.
 322 Tr. : Wɔm nso da adukuro mu. Wɔm nso da adukuro mu. Obia
 wɔ bɛbia wɔ da. ɛnna afafantɔ, akatekyire, abebe wɔm nso da he?
 323 Chd. : Ntontom.
 324 Tr. : ɛhɛ, aha, me se wɔm nso da he?
 325 Chn. : ɛbuo mu.
 326 Tr. : Wɔm da buo mu?
 327 Chd. : Nwira mu.
 328 Tr. : Wɔm da fa he?
 329 Chd. : Ndua so.
 330 Tr. : [Laughs] Wɔse wɔm da dua so. Me pɛ sɛ, wahunu sɛ nipa
 sei, yese nipa ɛda ɛfie mu. Wɔ da dan mu. ɛnna amokua nso da tokoro mu.

- enna ɔyow nso da fa he? Wɔ da adukuro mu. Saa ɛɛ, ntomtɔm, wansena, afafantɔ wɔm nso ɛda he? Wɔ da he?
- 331 Chd. : Afafantɔ wɔ da ayi, wɔ taretare ahahan so
- 332 Tr. : Mo mmɔ mo nsam ɛma no.
- 333 Chn. : [Clapping].
- 334 Tr. : ɛkyerɛ sɛ mo deɛ mo ennam a mo nhwɛ adeɛ. Wo ennam a, wo ennam na sɛ wo ɛkɔ a, wo hunu sɛ fafantɔ anɔpa wɔhyɛ, sɛ wura wɔhɔ sei a, na wa kɔ tare aseɛ. ɛhnɔm na wɔda. Wansena nsoso saa na won so da. Ntontom nso saa na wɔda. Ntontom wɔnda dan mu. wɔda wira mu.
- 335 Chn. : Ntontom wɔn da dan ne mu?
- 336 Tr. : Hɛɛ!
- 337 Chn. : Wɔda dan mua na waka wo.
- 338 Tr. : Aane, tie. Montie, sɛ yɛ kase ntomtɔm da dan ne mu a, na ɛkyerɛ sɛ wɔ noa na wasiɛ. Sɛ mo ahunu? Nipa da dan mu a, hwan na ɛsi dan no?
- 339 Chn. : Nnipa.
- 340 Tr. : enipa enna ɛsi yɛ. enipa enna ɛsi yɛ. enipa, **man, man** deɛ wɔno ɛfie, **house** enipa ete fie. Onipa te fie. **Man, number one, man** ɔte fie. enna yɛba **number two fish, fish** yɛ aboa bɛn? Wɔyɛ aboa bɛn?
- 341 Chd. : Adwene.
- 342 Tr. : Wɔ nso te ɛfa he?
- 343 Chn. : Nsuo mu.
- 344 Tr. : Nsuo mu. Yɛ fa no sɛ **river**. ɔte nsuo mu. Wɔte nsuo mu. enna yɛka reptiles, ɛmmaa wɔm ɛwia wɔm enan enan so no, a yɛbɔ ɛbi din tesɛ kotɛrɛ no. Wɔ nso wɔte he?
- 345 Chd. : Wɔtare dan ho.
- 346 Tr. : ɔketerɛ wɔte he?
- 347 Chn. : ɔtari dan ho.
- 348 Chd. : ɔforo dua.
- 349 Tr. : Wɔ foro dua. ɔketerɛ ete dua so.
- 350 Chn. : [Talking together]
- 351 Tr. : Wɔte dua so, **tree top**, ɛso na kotɛrɛ tɛɛ. Mo ahuu saa.
- 352 Chn. : Yahunu saa.
- 353 Tr. : Mo ahunu sɛ kotɛrɛ wɔte dua so?
- 354 Chn. : **Yes sir.**
- 355 Tr. : Seesei a yɛkɔ **number four birds. Birds** yɛ mmoa bɛn a?
- 356 Chn. : Nnomaa
- 357 Tr. : Nnomaa nsoso wɔm te he?
- 358 Chn. : [Talking together].
- 359 Tr. : Dwene ho paa ansa na waka. Anomaa wɔte he?
- 360 Chn. : Wɔte dua so.
- 361 Tr. : Wɔte dua so. Anomaa nsoso ete dua so. Wiɛ, anomaa te dua so?
- 362 Chn. : **No sir.**

- 363 Tr. : Anomaa te deɛ mu?
- 364 Chn. : Wɔkɔ tu adeɛ na wa da mu ɛnwene.
- 365 Tr. : ehe, anomaa te he?
- 366 Chn. : Wɔda buo mu.
- 367 Tr. : Wɔda buo mu. Yɛfrɛ no **nest, nest**. Mese yɛfrɛ no sɛn?
- 368 Chn. : **Nest.**
- 369 Tr. : **Nest.**
- 370 Chn. : **Nest.**
- 371 Tr. : **Nest.**
- 372 Chn. : **Nest.**
- 373 Tr. : Anomaa wɔte ɛbuo mu. Hwan ne na wahunu anomaa buo da?
- 374 Chn. : [Talking together]
- 375 Tr. : ɛ hwan ɛnna ahunu pɛtɛ buo da?
- 376 Chn. : [Talking together]
- 377 Tr. : Aane pɛtɛ wɔkɔ sesa ndua a, wɔkɔ sesa ndua naa wɔde abɛgugu hɔnom. Na wa yɛ ne buo, na wɔde bi agye ho sei. Na pɛtɛ ɛmmrɛ a wɔbɛ yɛ ɛbuo no na asɛɛ ne sɛn? Pɛtɛ yɛ buo a na asɛɛ ne sɛn?
- 378 Chd. : Na wɔbɛ ɛwo.
- 379 Tr. : Na wɔbɛ ɛwo. Ya, na ɛmmaa wɔ yɛ ɛnnomaa yɛnka sɛ wɔ ɛwo. Wɔ to. Mese sɛn?
- 380 Chn. : Wɔ to.
- 381 Tr. : Wɔ to. Sɛ wo hwɛ a ɛnnomaa nyinaa no obia wɔ ɛbuo a wɔte mu. Nanso wo hwɛ a, aboa te sɛ akyenkyena ehe na wɔtɛɛ? **Yes.**
- 382 Chd. : Wɔ da dua mu.
- 383 Tr. : Akyenkyena ehe, wɔte he?
- 384 Chd. : Wɔte
- 385 Tr. : **Yes** wɔte he?
- 386 Chd. : Ndua nkɔmu.
- 387 Tr. : Wɔte dua so. Wo hunu sɛ akyenkyena akɔ hyɛ ɛbuo mu a, wɔkɔ hyɛ tokoro mu a, na ɛkyerɛ sɛ wɔbɛ yɛ dɛn?
- 388 Chd. : Wɔbɛ to.
- 389 Tr. : Na wɔbɛ to. Sɛ mo ahunu sɛdɛɛ ɛsi tɛɛ.
- 390 Chn.: **Yes sir.**
- 391 Tr. : Hwan ɛna ahunu apɛtupɛrɛ da?
- 392 Chn. : Meɣa, meɣa!
- 23 Mins 30 secs
- 393 Tr. : Sɛ wo hunu sɛ apɛtupɛrɛ da buo mu a na wa yɛ dɛn?
- 394 Chd. : Na wa to
- 395 Tr. : Sɛ wɔn da prɛbuo so a na wɔwɔ fa he?
- 396 Chd. : ɛwira mu.
- 397 Tr. : ehe, na ehena na wɔtɛɛ?
- 398 Chd. : [Inaudible]
- 399 Tr. : Sɛ woka, kano kese.
- 400 Chd. : Na wɔte wira mu.

- 401 Tr. : ε wira mu fa he? εwira mu sen?
- 402 Chd. : εdua so.
- 403 Tr. : Na wɔte εdua so. Wɔte dua so. Wɔte dua so. Yenkɔ deε
εtɔso enum **insects**. **Insects** afafantɔ ka ho, akatekyire kaho eni ntetea
kaho.
- 404 Chn. : Wansena.
- 405 Tr. : Wansena kaho, abεbe
- 406 Chn. : Ntontom.
- 407 Tr. : Aane. Wɔm nso εhe na wɔm tee?
- 408 Chd. : **Park** so.
- 409 Chn. : [Laughter]
- 410 Tr. : ε wɔte park so. Ne fie ne **park** so? Fa hene na wɔtee?
- 411 Chd. : Fafantɔ tare dua ho.
- 412 Tr. : εhe, afafantɔ tare dua ho. εhe.
- 413 Chd. : Wɔm te nfikyirefikyire.
- 414 Tr. : εhe wɔte he?
- 415 Chd. : Wɔte wiram.
- 416 Tr. : Wɔm te nwiram. Wɔm εte wira mu. Wɔm εtete εhahaban
so. Wɔm tetare nhahaban so. Yεε, seesei ara ya hunu nea obiara εtee. Yε
ahunu se nipa wɔno deε wɔte fie. Yε ahunu se εε, ɔtwe, ɔyow, wansene,
wɔm εte adukuro mu. εna yahunu se nsuo mu enam, adwene nom eni nsuo
mu enam wɔm te nsuo mu. εna yaba **reptiles**, emmoa wɔm εnan εye εnan a
wɔm εwia no te se kotere, mampam,
- 417 Chd. : Apraa.
- 418 Tr. : εhe, apra deε wɔn to kosua.
- 419 Chd. : Denkyem.
- 420 Tr. : Denkyem deε wɔto kosua. Na saa mmoa no nso wɔm εda
εbɔne mu. Wɔm da bɔne mu. Mo ahunu, wɔm da εbɔne mu. εna yaba
insects. εno nso ya hunu se wɔm te wiram Seesei ara yeεba na ya be **draw**.
Obia be **draw** baako. Se wo **draw** nipa, wo **draw** me a, na wo a draw bebia
me tee. e! wo **draw** enipa εhe na wɔtee?
- 421 Chn. : Wɔte εfie.
- 422 Tr. Wɔte fie. **Alright** εhe.
- 423 Chn. : [Talking together]
- 424 Tr. : Aane, na wa ye bebia wɔtee. Se wo **draw** adwene a, na wo
a **draw** bebia wɔtee. Adwene wɔte he?
- 425 Chn. : Nsuo mu.
- 426 Tr. : Wo εntumi **ndraw** nsuo mu?
- 427 Chn. : Mbε tumi.
- 428 Tr. : Se wo draw kɔkɔ a, na wa **draw** εfa he?
- 429 Chn. : εbɔne mu.
- 430 Tr. : εbɔne a wɔ da mu. Se wo **draw** mampam a,
- 431 Chd. : [Coughs]
- 432 Tr. : Mampam a, wie no mom, wɔm da εntokoro mu. Se
mampam wo da tokoro mu woba emmoaa wɔm da buo mu, woba afafantɔ,

insects no moa, wɔm nso etetare ehahama eso. Aboa ben na wo nim a wono deɛ yɛ an bɔ ne din? Hwane nkrɔmɔ gu mu. [Tr. wakes a child snoring] ehe aboa ben a?

433 Chd. : Apɔnkyirene.

434 Tr. : Apɔnkyirene apɔnkyirene wɔ te he? Yɛse wɔ te he?

435 Chd. : Nsuo mu.

436 Tr. : enna wɔ sane te he?

437 Chn. : Kokoɔ so.

438 Tr. : Kokoɔ so. Wɔte nsuo mu esane te kokoɔ so. Apɔnkyirene wɔte nsuo mu esane te kokoɔ so. enso apɔnkyirene ete kokoɔ nsuo mu nso no nna no a yɛ sua ekwan ne a wɔm efaso ewo no yɛ nka no sɛ wɔn deɛ wo ewo ewɔ kokoɔ so o! Wɔto kosua wɔn nto ngu kokoɔ so. Wɔno deɛ wɔ to ne nkosua gu hene?

439 Tr. + Chn. : Nsuo mu.

440 Tr. : enti mo ma yen hwɛ no yiye. Wɔm a aka no deɛ, sɛ wɔ to a, tese reptile, kotere, mampam, akyekyedeɛ onini enom deɛ wɔm eto egu he? ebɔne mu. esane sɛ wɔm da bɔne mu, wɔm to egu bɔne mu. enna anomaa nsoso enam sɛ wɔda ebuo mu no, wɔm nso eto gu he?

441 Chn. : ebuo mu.

442 Tr. : Nti obia wɔ bɛbia wɔ to ne deɛ egu. Kɔ na kɔ fa **drawing exercise books** no bra na yɛhwɛ. Obia bɛhwɛ baako a wɔbɛ **draw**. Wo **draw** a,

443 Chd. : Me deɛ mbɛ **draw**,

444 Chn. : [Talking together]

445 Tr. : eha, nka deɛ wɔbɛ **draw** ɛkyere me, nka deɛ wɔbɛ **draw** nkyere me.

446 Chn. : [Talking together]

447 Tr. : ehe, wɔpɛ sɛ wo bisa biribi a bisa. Sɛ wo ebisa, ebia na aboa bi ewɔ hɔnom a ya abɔ ne din naa, ehe aboa ben a?

448 Chd. : Kɔkɔhwedeɛ.

449 Tr. : Akɔkɔhwedeɛ wɔte he?

450 Chn. : [Talking together]

451 Tr. : ehe, akɔkɔhwedeɛ wɔte he?

452 Chd. : ɛdan nkyɛn ne mu.

453 Tr. : ɛ!

454 Chd. : Wɔte nwira mu.

455 Tr. : Akɔkɔhwedeɛ te wira mu? Aane

456 Chd. : Ananse.

467 Tr. : Wose ananse, ananse wɔte he?

468 Chn. : ɛdan ne nkyɛn, wɔ doɔgyedoɔgye [dodges].

469 Chd. : Ntintan mu.

470 Tr. : Yɛɛ, montie, wɔse ananse wɔte ntintan mu. Ntintan Aborɔfo yɛfrɛ no **web**. Me se yɛfrɛ no sen?

471 Chn. : **Web**.

472 Tr. : **Web**.

- 473 Chn. : **Web.**
- 474 Tr. : /w/e/b/ **Web.**
- 475 Chn. : /w/e/b/ **Web.**
- 476 Tr. : Ntintan nono. Bɛbia wɔtɛɛ nono. Nti sɛ tɛmbia [every time] wo nam na sɛ wo hwɛ bɛbia ananse wɔtare a, wobɛ hunu sɛ waa nwene ne dan. Wayɛ ne dan, titiru ɛwiram. ɛdan mu seedɛɛ ɛyɛ a wo ntaa nhunu papa. Sɛ wokɔ.
- 477 Chd. : Nsuo kwan ho.
- 478 Chn. : [Talking together]
- 479 Tr. : ɛyɛ, ɛyɛ. ntintan, ntintan
- 480 Chn. : [Talking together]
- 481 Tr. : Wie, wie na yɛfrɛ no ntintan. Mo ahunu ananse ne dan nono. ɛtɔ dabi a sɛ mo kɔ mo ɛdan mu a, wobɛhwɛ na ɛntintan no bi wɔhɔ nom a na ananse wa awo na wɔ hyɛ mu. Mo ahunu. Na wa awuo.
- 482 Chn. : Bɛbi wɔhɔ nom a na wɔhyɛ,ɔtari pononu.
- 483 Tr. : ɛ wɔhyɛ fa he?
- 484 Chn. : [Talking together]
- 485 Tr. : ɛno dɛɛ bɛbia wɔhyɛ. Fa bia no ananse wɔ da ntintan mu. Akɔkɔhwedɛɛ nsoso wɔ no nso da dua so Akɔkɔhwedɛɛ wɔ da dua so. Odwan wɔ da ɛbuo mu. Okra wɔ da fie. Odwan yɛ ayɛ buo ɛnna wɔ da mu. wɔ wɔ fie
- 486 Chn. : [Talking together]
- 487 Tr. : ɛ wo tumi yɛ dɛn?
- 488 Chd. : Me tumi draw ɔkra.
- 489 Tr. : Wo draw ɔkra na wa draw bɛbia wɔtɛɛ. ɛhe na wɔtɛɛ?
- 490 Chd. : ɛfie.
- 491 Tr. : Sɛ wo draw

Appendix 5 (25) TG: Mathematics

LESSON : TWENTY FIVE

SCHOOL : ZONGO PRIMARY

CLASS : P3

TEACHER : TG

SUBJECT : MATHEMATICS

TOPIC : ADDITION OF MONEY

DATE : 13TH MARCH, 1996

- 1 Tr. : Obia ɛma na adwene ɛbra ha. ɛnnora yɛ sua nkonta. ɛɛn nkonta na yɛ sua yɛ? Woa wonim pagya wo nsa. Yɛ sua ɛn?
- 2 Chd. : Cedi.
- 3 Tr. : Yɛ sua ɛn?
- 4 Chd. : Pesewas.
- 5 Tr. : Yɛ sua ɛn?
- 6 Chd. : Cedis and Pesewas.
- 7 Tr. : Cedis and Pesewas. Cedis and Pesewas Cedis and Pesewas no yɛɔ din sɛn? Me bisa sɛ ɛɛn nkonta ɛnna yɛ sua yɛ. ɛnna wosɛ cedis and pesewas. Cedis and pesewas no mɛpɛ sɛ yɛɔ ne din pa. ɛɛn nkonta? sɛ obi kasɛ cedis and pesewas a na ɛyɛ ɛn? Woa wonim pagya wo nsa. Sɛ yɛ ka sɛ cedis and pesewas a na ɛyɛ ɛn? ɛdin baako bi na yɛ de frɛ no. ɛɛn din ɛnna yɛde frɛ cedis and pesewas?
- 8 Chd. : ɛyɛ sika.
- 9 Tr. : ɛyɛ sika, sika nkonta. Nnora yɛ sua ɛɛn?
- 10 Chn. : Sika nkonta.
- 11 Tr. : Sika nkonta cedis and pesewas. Cedis ɛyɛ yɛn yɛ sika yɛdie. ɛnna pesewas no me ka kyɛrɛ mo sɛ me bɛ mmodɛn a sɛ mhwɛhwɛ pesewas no bi ɛde aba abɛkyɛrɛ mo. Obi abɔ me anohoba sɛ wɔbɛ ma me pesewas no bi na me de aba abɛ kyɛrɛ mo. Nti mede bɛba ɛbia ɔkyɛna anna Efiada. Cedis dɛɛ me nim sɛ moa mo nim. Mo mu bɛbɛrɛɛ wɔbi. Cedis gu ahodoɔ bɛbɛrɛɛ. Weisɛi yɛɔ din sɛ **two hundred cedis**. Me si yɛɔ din sɛn?
- 12 Chn. : **Two hundred cedis**.
- 13 Tr. : Saa **two hundred cedis** wei no, ɛwɔ din bi a yɛfrɛ no. **Two hundred cedis** ɛwɔ din bia yɛ frɛ no. Hwan na ɛnna ɛbetumi abɔ saa din no akyɛrɛ me? **Yes**.
- 14 Chd. : Pɔn.
- 15 Tr. : ɛha. Yɛnka no saa pɔ pɔ no. ɛmpaninfoɔ ɛnna ɛka no saa. Yɛnka. Yɛfrɛ no sɛn?
- 16 Chd. : **Two cedis**.
- 17 Tr. : Yɛnka **two cedis**. Saa wei a ɛkuta me no. yɛɔ din sɛn? **Yes**.
- 18 Chd. : **Two hundred**.

- 19 Tr. : Yebɔ din **two hundred**. Na me pɛ edin pa yɛde frɛ no. ennee eyɛ me sɛ mo nnim. yɛfrɛ no cedi **note**. Cedi **note**. **Note** enna yɛ wɔ cedi **coin** cedi **coin**.
- 20 Chn. : [Laughter].
- 21 Tr. : Cedi **coin** no ɛbi ne, seesei a mo mu bɛbɛree keta **coins**. Obia ɛfa ne coin ɛkɔ soro ma me hwɛ
- 22 Chn. : [Show coins up but one shows cedi note].
- 23 Tr. : [Points to a child showing a note] Dabi wei yɛ cedi **note**. **Note** ne krataa. Mese **note** ne dɛn?
- 24 Chn. : Krataa.
- 25 Tr. : **Note** ne dɛn?
- 26 Chn. : Krataa.
- 27 Tr. : **Coins** nso ne dɛɛ he?
- 28 Chn. : Dadeɛ.
- 29 Tr. : Dadeɛ kinkran kinkran no Obia ɛnwoso ne dɛɛ ma yɛnhwɛ.
- 30 Chn. : [Jangle their coins]
- 31 Tr. : **Alright**, eyɛ, eyɛ. Cedi **coin**. Sɛ ɛdɔso a yɛfrɛ no **coins**. Sɛ eyɛ baako a coin. Mese yɛfrɛ no sɛn?
- 33 Chn. : **Coin**.
- 34 Tr. : **Coin**.
- 35 Chn. : **Coins**.
- 36 Tr. : **Coins**.
- 37 Chn. : .
- 38 Tr. : ɛkyɛrɛ sɛ ɛdɔso. **Alright**. ɛɛ yɛ wɔ two hundred wɔhɔ, **two hundred** cedi **note** wɔhɔ enna yɛ wɔ **five hundred**. Yɛwɔ **hundred** nso wɔhɔ. Yɛwɔ **fifty** nso wɔhɔ. enna yɛwɔ **thousand** cedi **note** ɛwɔhɔ. Hwan enna wɔ wɔ **thousand** cedi **note** ɛwɔ ne botɔ mu? Wɔn fa nkyɛrɛ yɛn. Mo yɛ ahiafoɔ saa? Hwan na wɔ nhunu bi da.
- 39 Chn. : Ya hunu da.
- 40 Tr. : **Alright**, yahunu bi da. ennee sɛ yahunu bi da dɛɛ a, wei nso yɛbɛ frɛ no sɛn?
- 41 Chn. : **Two thousand** cedi **note**.
- 42 Tr. : **Alright two thousand** cedi **note**, **two thousand** cedis. eyɛ **note**.
- 43 Chd. : **Four thousand**.
- 44 Tr. : Wei, aha **four thousand** ɛnihɔ. Dɛɛ ɛkɔpim a yɛsɛn?
- 45 Chn. : **Five thousand**.
- 46 Tr. : Yese **five thousand** **note**. enna **coins** no nsoso yɛwɔ yɛwɔ **ten** pesewas ɛwɔhɔ. ɛno ɛnnɛ yɛn hunu. Yɛn fa nyɛ adwuma bio. Yɛwɔ **twenty** pesewas wɔhɔ, yɛwɔ **fifty** pesewas wɔhɔ. Yɛwɔ **hundred** pesewas wɔhɔ. **Hundred** pesewas no ɛma **one** cedi. **Hundred** pesewas no ɛma wo sɛn?
- 47 Chn. : **One** cedi. ɛnnora yɛsua ɛhu sɛ **hundred** pesewas no eyɛ **one** cedi. Sɛ **hundred** pesewas no yɛ **one** cedi a, **hundred** pesewas bia yɛ **one** cedi a, na wo gyɛde sɛ **twenty** cedis yɛi ɛbɛyɛ pesewas sɛn? Wei eyɛ sɛn?
- 48 Chn. : **Twenty**.

- 49 Tr. : enye **twenty** pesewas ne oo! Wei ye **twenty** cedi **coin**. **Twenty** cedi **coin**. Mo ahunu? He! Nti se **hundred** pesewas bia eye **one** cedi. enti wo gyede se **twenty** cedis no yɛbe nya pesewas sen? Wei deɛ wo paga wo nsa koraa wore nhu. ebe bu afa wo adwene mu. esane se edoɔso paa. Cedi **twenty**. Cedi baako bia ye be nya **hundred**. Cedi baako ne, cedi mmienue, mmeensa, enan, enum saa **twenty**. ekoro bia nso wom **hundred** pesewas. ekyere se ebe doɔso aboromoso. Mo deɛ mo nduru hɔnom se yɛbe kyere mo saa. eso ma mo. enti deɛ yede so a ne se;
- 50 Chn. : [Noise :Children talking together].
- 51 Tr. : Pesewas, pesewas, **fifty** pesewas, **hundred** pesewas. Yee, se yahunu se **note**; krataa yefre no **note**.
- 52 Chn. : Ane.
- 53 Tr. : Krataa; **paper** no a yede ɔ aduane die no, yefre no **note**. Mese yefre no sen?
- 54 Chn. : **Note**.
- 55 Tr. : **Note**.
- 56 Chn. : **Note**.
- 57 Tr. : **Note**.
- 58 Chn. : **Note**.
- 59 Tr. : enna kinkran kinkran no nsoso deɛ yede kye nkwadaa no. Wei nom na yede kye nkwadaa oo! Mo nim saa? enso, wei yefre no borɔfo din sen?
- 60 Chn. : **Coin**
- 61 Tr. : Yese yefre no sen?
- 62 Chn. : **Coin**
- 63 Tr. : **Coin**. Nti mo nhwe yiye. Na se obi ka kyere wo se me pa wo kyew e, wo nsesa ebia me **coins** ye na wo ema me **note**. Obi wɔhɔ nom a mpaninfoɔ deɛ wɔm sane fre no **paper money**. Mese wɔm fre no sen?
- 64 Chn. : **Paper money**
- 65 Tr. : **Paper money**. Yaa, na yepapa no mo taa kano saa. Wɔse **paper money**; 'Yedee yadi **paper money** pen'. enne deɛ mo sika koraa ahɔndin enim. **paper money** Se mo ahunu. Wei nom na wɔm fre no **paper money**. eye **paper**.
- 66 Chn. : **Yes sir**.
- 67 Tr. : Wei seesei a se **master** de eɔya tum seesei a ebe hye. Nanso wei, **coins** ye, ebe ye den?
- 68 Chn. : enhye.
- 69 Tr. : Aden ntiara
- 70 Chn. : eye dadeɛ.
- 71 Tr. : eye dadeɛ. **Coins** no eye dadeɛ enna **paper** nso ye!
- 72 Chn. : eye krataa.
- 73 Tr. : Krataa. Mo ahunu nsosonea eda ntemu?
- 74 Chn. : **Yes sir**.
- 75 Tr. : ehe, nti mo nhwe no yiye. se **paper money** enna **coin**, **coin**. Seesei a yahunu se, se yedi sika. Wode **hundred** pesewas a ema wo **one** cedi no. Se

wode kɔ akɔtɔ adeɛ a, wode kɔ akɔtɔ adeɛ a, adeɛ no a wode bɛtɔ no, sɛ wode pesewas no ma no a wose ɛbia me tɔ kɔkɔ. Ya kyeɛ **hundred** pesewas. Me tɔ ɛmo, mo deɛ ɛmo pa na mope, **hundred** pesewas. Sɛ mo ahunu. Sɛ **hundred** pesewas no mese yɛfrɛ no sɛn? **Hundred** pesewas no ne din de sɛn?

76 Chd. : **One** cedi.

77 Tr. : Mese ne din de sɛn?

78 Chn. : **One** cedi.

79 Tr. : **One** cedi [Writes on the board]. Wei deɛ ma twɛrɛ ye yɛbɔ din sɛn? Woa wonim pagya wo nsa. Yɛbɔ din sɛn?

80 Chd. : **Fifty** pesewas.

81 Tr. : Wɔse yɛbɔ din sɛn?

82 Chn. : **Fifty** pesewas.

83 Tr. : **Fifty** pesewas. ɛnna **sign** wei a ma twɛrɛ ye yɛbɔ din sɛn?

84 Chd. : **Plus**.

85 Tr. : Wɔse yɛbɔ din sɛn?

86 Chn. : **Plus**.

87 Tr. : **Plus** nso aseɛ ne sɛn?

88 Chd. : Kabom.

89 Tr. : Ka no kese ma obia nte bi ɛnyɛ me nkoa na woka ma matie.

90 Chd. : Kabom!

91 Tr. : ɛhɛ

92 Chd. : Nkabom.

93 Tr. : Nkabom. ɛyɛ a na akɔ ye kasa bi dodo. Nkabom. **Yes**.

94 Chd. : Fakaho.

95 Tr. : Fakaho, nkekaho, **plus**. [Again writes on the board] Wei nso yɛbɔ din sɛn? Na mo line wei seiso deɛ obi ɛhu deɛ ma twɛrɛ? Deɛ ma twɛrɛ yɛbɔ din sɛn? Yɛbɔ din sɛn? Sɛ wote ha, wo hunu **blackboard** no so. Yɛbɔ din sɛn?

96 Chd. : [Inaudible.]

97 Tr. : Ka no kese.

98 Chd. : **Forty five**.

99 Tr. : Wɔse yɛbɔ din sɛn?

100 Chn. : **Forty five**.

101 Tr. : Wo nim **forty five**? Ee, ɛnnɛɛ sɛ wonim **forty five** pesewas deɛ a ɛnnɛɛ wobe sane akɔ aha [pointing to class two]. deɛ ɛdi ɛtoɔ paa no yɛfrɛ no sɛn?

102 Chd. : P2.

103 Tr. : Wei nso yɛbɔ din sɛn? M'adamfo yɛbɔ din sɛn?

104 Chd. : **Thirty five** pesewas.

105 Tr. : **Thirty five** pesewas, **thirty five** pesewas Wei sei gyina hɔ nom ma sɛn?

106 Chd. : **Plus**.

- 107 Tr. : **Plus** ana se fakaho. Yenfa fifty pesewas ebeka forty five pesewas, na yen sane nfa **thirty five** pesewas efa nkaho. Seesei a yeye no mmeensa. Yenhwe sedee yesi ye no. Ye, wei ye den nea?
- 108 Chd. : **Zero**.
- 109 Tr. : **zero** wode ka **five** ho a eye sen?
- 110 Chn. : **Five**.
- 111 Tr. : enno dee maka akyerɛo se yen mpe Makaranta sukuu. **Zero** wode **five** kaho a yebɛ frɛ no sen? Wo wɔ adeɛ **zero** na wode adeɛ **five** kaho a Rebecca yɛfrɛ no sen?
- 112 Rebecca : [No response]
- 113 Chn. : [Noise :Children talking together..]
- 114 Tr. : Oo! Yesua, yaka adeɛ seesei a. Sen. **Five** se wode **zero** kaho a eye sen?
- 115 Chn. : [Noise :Children talking together..]
- 116 Tr. : eye sen? eye sen? he!
- 117 Chn. : **Sir, sir**.
- 118 Tr. : eye sen?
- 119 Chd. : **Five**.
- 120 Tr. : Kano kɛse na me dee me ntie.
- 121 Chd. : **Five**.
- 122 Tr. : **Five**, ee, enti **zero** wode eka **five** ho a, wɔm nyinaa kase yɛfrɛ no sen?
- 123 Rebecca : **Fifty**.
- 124 Tr. : Hwan na eɛ **fifty**?
- 125 Chn. : [Noise :Children talking together..]
- 126 Tr. : eha, efa ekɔ hye obi nkaho. **Zero** wode **five** kaho a mo nyinaa kase eye **five**. enna mese enye Makaranta sukuu. enti ye sane abisa. Rebecca! enti **zero** paa **class onefo** koraa kase hwee enihɔ. **Zero** kyere se enye biribia. **Zero, zero** kyere se **empty**. Kenten wei eye **zero**. Kenten wei ana **bagi** [bag] wei. Wei enye zero biribi wom. Mo ahunu se biribi wo mu? ennoɔma ewo mu ye susu se ebe ye nnoɔma ben a? eden nea?
- 127 Chn. : Kosua.
- 128 Tr. : Kosua. ennee, wei sei so ye? edeen enna ewo mu?
- 129 Chn. : Hwee enim.
- 130 Tr. : Hwee enim. enti wode adaka wei a hwee enim na wode beka adaka wei sei ho a, ebe ye adeɛ dodoɔ sen na wobɛ nya afiri mu? Sen?
- 137 Chd. : **Seven**.
- 138 Tr. : Wɔse eye **seven**. **One, two, three, four, five, six, seven**. Se wahu. Wei hwee enim. Nti wode dee hwee enim ye de beka wei sei ho a, ne mmeinu ye adaka mmeinu nanso ye nya **seven** ewom. **Seven**, Rebecca wote asee?
- 139 Rebecca : [Nods].
- 140 Tr. : **Alright**, ye anya **five**. **Five** wode **five** kaho a eye sen?
- 141 Chn. : [Noise :Children talking together..]

- 142 Tr. : **Five** wode **five** kaho a eye sen? ebinom pagya pagya yen nsa. **Five** paa wode **five** kaho a Sarfo eye sen?
- 143 Sarfo : [Inaudible.]
- 144 Chn. : W³se **forty five**.
- 145 Tr. : Oo! Mo mua mo ano. **Five** wode **five** kaho a wose eye **forty five** be gye twere ma yenhwe. **Five** wode **five** kaho a be gye twere ma yenhwe. enno nti na ma kakyere mo se eye a mo nfa **counters** no. **Five** wode **five** kaho a eye **forty five** twere **forty five** no ma yenhwe. **Five** wode **five** kaho a,
- 146 Chn. : [Noise: Children talking together]
- 147 Chd. Mo mua mo ano na won twere na adee.
- 148 Tr. : **Five** wode **five** kaho a, Oo! Mo dee mon ngyae. **Five** wode **five** kaho. Fa ma me, mepaa wo kyew. Fa ma me. Fa ma me. **Five** wode **five** kaho a ene me boa wo aye adee. Se **five** wode **five** kaho a, ee Sarfo wo **counters** w³hene? Ha? Wo ne bi? Hena na ne **counters** w³ha?
- 149 Chn. : Ma anfa bi aba.
- 150 Wo **counters** w³ha?
- 151 Chd. : Ane
- 152 Tr. : Fa ma Sarfo. **Five** na w³nfa **five** nkaho ma yenhwe. Sarfo befa. Obia nto ne **book** mu. Obia nto ne **book** mu. emano enye fi. Sarfo ye no ntem. To wo **book** no mu. Bra, fa **counters** no bra enim mu ha
- 153 Chn. : [Noise: Children talking together]
- 154 Tr. : Yese **five** wode **five** kaho a eye sen? Kan ne w³ha ma yenhwe. **Five** na fa **five** kaho ma yenhwe. Ye ntem.
- 155 Sarfo : **Ten**.
- 156 Tr. : Kano kесе ma obia nte. Sen na wode kaho a wo nya ten?
- 157 Sarfo : **Five**.
- 158 Tr. : Kano kесе ma me nte.
- 159 Sarfo : **Five**.
- 160 Tr. : enna wo yeden?
- 161 Sarfo : Mede kaho.
- 162 Tr. : Wode ka deen ho?
- 163 Sarfo : **Five**.
- 165 Tr. : **Five** na wode **five** kaho enna wo nya sen?
- 166 Tr. : **Ten**.
- 167 Sarfo : enna **first** no so wose **five** wode **five** kaho a wonya sen?
- 168 Sarfo : **Ten**.
- 169 Tr. : K³ k³ twere **ten** no w³ blackboard no so ma min hwe.
- 170 Sarfo : [Goes to the blackboard.]
- 171 Tr. : Fa ma me. Fa **duster** no ma me. Wie, mo nhwe. Yehunu se zero wode **five** kaho a eue **five**. enna **five** nso wode **five** kaho a eye sen?
- 172 Chn. : **Ten**.
- 173 Tr. : **Ten**. **Ten** no eni. **Ten** no sen na yebe twere? **Ten** no yebe twere sen? Yebe twere sen?
- 174 Chd. : **Nine**.

- 175 Tr. : Yiri woho paa. Adeɛ yi ɛyɛ ten ɛnna yɛ nya no wɔha. Yɛ twerɛ **nine**, asɛɛ ne sɛn? Adɛn na ɛsɛsɛ yɛ twerɛ **nine**? Adɛn nti na ɛsɛsɛ yɛ twerɛ **nine**? Yɛbɛ twerɛ sɛn?
- 176 Chd. : Yɛbɛ twerɛ **zero**.
- 177 Tr. : Yɛbɛ twerɛ **zero**. Wɔse yɛbɛ twerɛ sɛn?
- 178 Chn. : **Zero**.
- 179 Tr. : Yɛbɛ twerɛ **zero** yɛ ahyɛ ha. **Zero** deɛ ɛwɔ nifa yi ɛnna ya twerɛ. Nti aka sɛn?
- 180 Chn. : **One**.
- 181 Tr. : Nti yɛbɛ yɛ no dɛn?
- 182 Chn. : Tikya; Tikya; Tikya; Tikya
- 183 Tr. : Wo nim a pagya wo nsa. Yɛbɛ yɛ no dɛn? **One** no yɛbɛ yɛ no dɛn?
- 184 Chd. : Yɛde bɛka yɛi ho.
- 185 Tr. : Yɛde bɛka deɛ he ho?
- 186 Chd. : [Points to next number column.]
- 187 Tr. : Aha? Bɔ din, bɔ din. Yɛde bɛka yɛi ho?
- 188 Chd. : Yɛde bɛka **five plus four** no ho.
- 189 Tr. : ɛhɛ, wosɛ yɛde bɛka **five plus four**. Yɛde bɛka deɛ he ho?
- 190 Chd. : **Zero** no ho.
- 191 Tr. : Yɛde bɛka **zero** no ho?
- 192 Chd. : Yɛde bɛka **five** no ho.
- 193 Tr. : Yɛde ka **five** no ho a ɛbɛ yɛ sɛn?
- 194 Chn. : **Six**.
- 185 Tr. : ɛbɛ yɛ **six**. Ne yaba ha. Wode **four** kaho a ɛyɛ sɛn? Veronica ɛyɛ sɛn? **Six** wode **four** kaho a ɛyɛ sɛn?
- 186 Vero.: **Nine**.
- 187 Tr. : **Six** wode **four** kaho a ɛyɛ sɛn? **Six** wode **four** kaho a ɛyɛ sɛn?
- 188 Chn. : [Noise :Children talking together].
- 189 Tr. : **Six** wode **four** kaho a ɛyɛ sɛn? **Six** wode **four** kaho a ɛyɛ sɛn?
- 190 Chn. : Hey!, Hey!, Yee!
- 191 Tr. : **Six** wode **four** kaho a ɛyɛ sɛn?
- 192 Chd. : [Inaudible].
- 193 Tr. : Ha! **Six** wode **four** kaho a ɛyɛ sɛn? Adeɛ **six** wode **four** kaho a ɛyɛ sɛn? **Six** wode **four** kaho a ɛyɛ sɛn?
- 194 Chd. : [Inaudible].
- 195 Chn. : Ka yɛ
- 196 Tr. : Ka no kɛsɛ na wore nka nkyɛrɛ me nko. ɛyɛ sɛn?
- 197 Chd. : ɛyɛ **ten**.
- 198 Tr. : Wosɛ ɛyɛ **ten**. Wosɛ ɛyɛ **ten**. **Six** wode **four**, ɛyɛ **ten**. Yɛn hwɛ **six** koraa, **one**, **two**, **three**, **four**, **five**, **six**. Yɛn fa sɛn nkaho?
- 199 Chn. : **Four**.
- 200 Tr. : **Four**, **one**, **two**, **three**, **four**. Mo ma yɛn kan ne hwɛ.
- 201 Chn. : **One**, **two**, **three**, **four**, **five**, **six**, **seven**, **eight**, **nine**, **ten**.
- 202 Tr. : Woa wo kase ɛyɛ **five** no, adɛn ntiara? Kyɛrɛ deɛ ntiara wo kase ɛyɛ **five**. ɛbia na ɛyɛ **five** ampa. ɛyɛ **ten**. **Ten** wode **three** kaho a ɛyɛ sɛn?

- Amoako Kofi. **Ten** wode **three** kaho a eye sen? Wo wɔ adee **ten** na wode three aka ho a eye sen? Wo eɔa anaa?
- 203 Amoako : Dabi.
- 204 Tr. : **Ten** wode **three** kaho a eye sen?
- 205 Chd. : **Thirteen**.
- 206 Tr. : Wose eye sen?
- 207 Amoako : **Thirteen**.
- 208 Tr. : Nti nka wodee wo nim se ten yede **three** kaho a eye thirteen.
- Alright**, wɔse eye sen?
- 209 Chn. : **Thirteen**.
- 210 Tr. : **Thirteen**, one, two, three ekabom a eye **thirteen**.
- 211 Chn. : **Thirteen**.
- 212 Tr. : Wose eye sen?
- 213 Chn. : **Thirteen**.
- 214 Tr. : **Thirteen** no sen na yebɛ twere? : **Thirteen** no yebɛ twere no sen?
- 215 Chd. : **Three**.
- 216 Tr. : Yebɛ twere **three**? Yebɛ twere sen? **Yes**.
- 217 Chd. : Yebɛ twere **three**.
- 218 Tr. : Yebɛ twere **three**?
- 219 Chd. : **Thirteen** no nyinaa.
- 220 Tr. : Yebɛ twere **thirteen** no nyinaa ahye hɔ. Na emom yebɛ twere **three** no ahye saa **three** wei ase. Na yabɛ twere one no ahye ha. Wei eye den nea? eye den nea?
- 221 Chn. : Pesewas.
- 222 Tr. : Mo bɛ twere pesewas no wɔha. Ya wiei?
- 223 Chn. : **Yes sir**.
- 224 Tr. : Ya wiei?
- 225 Chd. : **Yes sir**.
- 226 Tr. : Woa wo nim pagya wo nsa. Ya wiei? Oo! Woa wo nim pagya wo nsa. Se wode wo nsa kɔ fifa wotiri mu te sedee wɔ kum ntomtɔm a, ya wiei? ehe.
- 227 Chn. : **Yes sir**.
- 228 Tr. : ehe
- 229 Chn. : **No sir**.
- 230 Tr. : ehe yebɛ ye no den?
- 231 Chd. : Yede bekɔ cedis ene pesewas
- 232 Tr. : Yede bekɔ cedis ene pesewas. Wɔse yede bekɔ den?
- 233 Chn. : Cedis ne pesewas.
- 234 Tr. : ee se yede **one hundred and thirty** pesewas ekɔ cedis ne pesewas a yebɛ ye no den? Yebɛ ye no aden? Yede **one**, ehe
- 235 Chd. : Ye kan ne mmeinu efiri nifa
- 236 Tr. : Yebɛ kan ne mmeinu efiri nifa. Ye kan ne mmeinu efiri nifa a yebɛ ye no de? Yebɛ ye no de?
- 237 Chd. : Yebɛ si **point** wɔhɔ

- 238 Tr. : Yɛbɛ si **point** wɔhɔ. enti mmeinu no, yɛkan ne afiri nifa. Mo ma yɛhwɛ yɛ.
- 239 Chn. : **One, two.**
- 240 Tr. : Na ya si **point** wɔ ha.
- 241 Chn. : **Yes sir.**
- 242 Tr. : Nti sɛ yɛ si **point** wɔ ha, ɛnnɛɛ na yɛbɛ frɛ no sɛn? **Yes.**
- 243 Chd. : **Two decimal places.**
- 244 Tr. : **Two decimal places.** Mo huu sɛ **two decimal places** na ya si **point** no. Seesei a, sɛ yɛbɔ din a yɛbɛ bɔ din sɛn?
- 245 Chd. : Sika.
- 246 Tr. : Sika. Na se yɛbɔ din a yɛbɛ bɔ din sɛn? Wobɛ tumi abɔ din? Bɔ din ma me hwɛ
- 247 Chd. : **Thirty** pesewas.
- 248 Tr. : Hum yɛbɛ bɔ din sɛn? Yɛbɛ bɔ din sɛn? Wobɛ pagya wo nsa a na wo a pagya wo nsa ɛnyɛ sei! Yɛbɛ bɔ din sɛn?
- 249 Chd. : Thirty pesewas and
- 250 Tr. : Yɛbɛ bɔ din sɛn?
- 251 Chd. : **One** cedi **thirty** pesewas.
- 252 Tr. : **One** cedi **thirty** pesewas. Mo mmɔ mo nsam ma no
- 253 Chn. : [Clapping]
- 254 Tr. : Aa! Wo ɛtiemo denden ama yate sɛ wo ka biribia. Na wo yɛ. Wei gyina hɔ ma sɛn?
- 255 Chd. : **One hundred.**
- 256 Tr. : Wei gyina hɔ ma sɛn?
- 257 Chd. : **Hundred.**
- 258 Tr. : Wei gyina hɔ ma **hundred** ɛnna wei nso ɛgyina hɔ ma sɛn?
- 259 Chd. : **Thirty.**
- 260 Tr. : **Thirty.** Nti wei gyina hɔ ma one cedi, thirty pesewas. **One** cedi **thirty** pesewas. Me twɛrɛ foforɔ ma gu ha na ma hwɛ sɛ, sɛ wobɛ tumi ayɛ a. Woa wo yɛ ɛnono, wo kyɛrɛ mu akyɛrɛ yɛn sɛdɛɛ me ka yɛ. enti sɛ wo kyɛrɛ mu akyɛrɛ yɛn nea na mede afidie yi aba, na dɛɛ wo ka akyɛrɛ yɛ nyinaa yɛyɛ. Hwan na wɔ bɔpɛ sɛ wɔ bɛba abɛ yɔ?
- 261 Chn. : [All talking together]
- 262 Tr. : Aha, sɛ me ntwerɛ yɛ kora, hwan na wɔpɛ sɛ wɔ bɛba? Mede ɛkɔ fam.
- 263 Chn. : [Noise: Children talking together..]
- 264 Tr. : Mea wo ano. Woa wo bɛ tumi ayɛ no bra. Hwan na ɛba? Mohwɛ, mo hwɛ. Me se yɛfiti aseɛ a, yɛfiti firi fa he?
- 265 Chn. : Nifa.
- 266 Tr. : Wei yɛbɔ din sɛn?
- 267 Chn. : **Eight.**
- 268 Tr. : **Eight.** Wei yɛbɔ din sɛn?
- 269 Chn. : **Nine.**
- 270 Tr. : **Plus, plus** sɛn?
- 271 Chn. : **Four.**

- 272 Tr. : **Four.** Nti wei sei, sɛ wode five ɛkaho a, wobɛ nya sɛn?
- 273 Chd. : **Ten.**
- 274 Tr. : Eie! Wode five kaho a wobɛ nya sɛn?
- 275 Chd. : **Thirteen.**
- 276 Tr. : **Thirteen. Thirteen. Eight. One, two, three, four, five, six, seven, eight plus five, One, two, three, four, five.** Wose yɛbɛ nya sɛn?
- 277 Tr. : Yɛ nkan hwɛ sɛ yɛbɛ nya **thirteen** a.
- 278 Chn. : **One, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen.**
- 279 Tr. : Na ya sane de sɛn akaho?
- 280 Chn. : **Four.**
- 281 Tr. : **Four. One, two, three, four.** Nti **thirteen** yɛde **four** kaho a yɛbɛ nya sɛn? yɛbɛ nya sɛn?
- 282 Chd. : **Seventeen.**
- 283 Tr. : Wɔse yɛbɛ nya sɛn?
- 284 Chn. : **Seventeen.**
- 285 Tr. : **Seventeen** no ne yie. **Seventeen** no nea he na yɛbɛ twɛrɛ no kane? **Seventeen** noa yɛ nya yɛ he yɛbɛ twɛrɛ dɛɛ ɛhe ne kane?
- 286 Chd. : **Seven.**
- 287 Tr. : Yɛbɛ twɛrɛ dɛɛ ɛhe kane? **Seven** wei a ɛwɔ nifa yi ɛnna yɛbɛ twɛrɛ ne he? Na aka sɛn? Aha. Na aka sɛn?
- 288 Chd. : **One.**
- 289 Tr. : **One** no yɛbɛ yɛ no dɛn? **One** no yɛbɛ yɛ no dɛn? **One** no yɛbɛ yɛ no dɛn?
- 290 Chd. : Yɛde bɛkɔ akɔ ka **four** wei ho. Na yɛde **four** no aka three yi ho, na yɛde aka **four** yi ho.
- 291 Tr. : Kan, kan, kan ma yɛhwɛ.
- 292 Chd. : Inaudible.
- 293 Tr. : ɛyɛ sɛn?
- 300 Chd. : **Twelve.**
- 301 Tr. : Wose ɛyɛ **twelve.** **Twelve** yɛbɛ yɛ no dɛn?
- 302 Chd. : Yɛbɛ twɛrɛ ne nyinaa ahyɛhɔ.
- 303 Tr. : Yɛbɛ twɛrɛ ne nyinaa ahyɛhɔ. Sɛn na yɛbɛ si atwɛrɛ no? **Yes.**
- 304 Chd. : Wo twɛrɛ two no hyɛ seven no ho a.
- 305 Tr. : Me ntɛwɛrɛ two no nhyɛ **seven** no ho ha? Me ntɛwɛrɛ nhyɛ he?
- 306 Chd. : Wo twɛrɛ two no hyɛ one no ase na wa twɛrɛ one no ahyɛ plus no ase
- 307 Tr. : Wo twɛrɛ two no hyɛ one no ase na wa twɛrɛ one no ahyɛ plus no ase. Wiɛ, Wei nyinaa yɛbɔ din sɛn? Nea ya twɛrɛ hɔye yɛbɛbɔ din sɛn? wo ya wo nim pagya wo nsa. Wei dɛɛ ya twɛrɛ yɛ nyinaa yɛbɛ bɔ din sɛn? yɛbɛ bɔ din sɛn?
- 308 Chd. : **One twenty seven** pesewas.
- 309 Tr. : Wɔse yɛbɔ din sɛn?
- 310 Chn. : **One twenty seven** pesewas.
- 311 Tr. : **One twenty seven** pesewas. Ya wiei?

- 312 Chn. : **No sir.**
- 313 Tr. : Yɛbɛ yɛ no dɛn? Wo ya wo nim pagya wo nsa. **Yes.**
- 314 Chd. : Yɛde kɛkɔ cedis ne pesewas.
- 315 Tr. : Yɛde kɛkɔ cedis ne pesewas. Yɛde kɔ cedis ne pesewas a sɛn na yɛbɛ si aye no? Wɔ noa koroɔ noa na wɔ bɛ sane aka? Yɛde kɔ cedis ne pesewas a nipa baako pɛ na ɛka? Yɛbɛ yɛ no dɛn?
- 316 Chd. : Yɛbɛ kan ne afiri nifa na yɛde **point** no asi hɔ.
- 317 Tr. : Yɛbɛ kan ne afiri nifa he ne?
- 318 Chd. : Nifa sei.
- 319 Tr. : ɛhɛ sɛn na yɛbɛ kan?
- 320 Chd. : Yɛbɛ kan **two decimal places.**
- 321 Tr. : Yɛbɛ kan **two decimal places. One, two.** Na yɛde **point** no asi ha. Yɛde **point** no si hɔ nomoa, yɛbɛ twɛrɛ dɛn? Yɛbɛ twɛrɛ dɛn?
- 322 Chd. : Cedis.
- 323 Tr. : Yɛbɛ twɛrɛ cedis no ahyɛhɔ. ɛnnɛ na **answer** no yɛ sɛn?
- 324 Chd. : **One** cedi **twenty seven** pesewas.
- 325 Tr. : **One** cedi **twenty seven** pesewas **One** cedi **twenty seven** pesewas Mo ate aseɛ?
- 326 Chn. : **Yes sir.**
- 327 Tr. : Hwan na ɛtɛ akyire naa wɔde nsam agu ne tiri so no? Wo ate aseɛ?
- 328 Chd. : **Yes sir.**
- 329 Tr. : Aa!
- 330 Chd. : **Yes sir.**
- 331 Tr. : Dɛɛ yɛbɛ yɛ yi wo na wobɛ yɛ akyɛrɛ yɛn. Na wobɛ kyerɛkyɛrɛ mu akyɛrɛ yɛn. Wote aseɛ? Hɛ! Aa! Bra. Yɛ. obia te dɛɛ ya yɛ no ase?
- 332 Chd. : **Yes sir.**
- 333 Tr. : Amponsem wote aseɛ?
- 334 Amponsem : [Inaudible.]
- 335 Ha? **No sir** anaa **yes sir**?
- 336 Chd. : Wɔse **no sir.**
- 337 Tr. : **No sir**, Kofi Amoako wote aseɛ? Ane, nti wose wonte aseɛ. Ampem sɛn na wɔse wonte aseɛ? Ne sɛn ho na wose wonte aseɛ? Sore, sɛn na wonte aseɛ?. Wei ɛkyɛrɛ sɛn?
- 338 Ampem : **Plus.**
- 339 Tr. : **Plus**, aseɛ ne sɛn? Yese **plus** a aseɛ ne sɛn?
- 340 Ampem : Fakaho
- 341 Tr. : Fakaho. Fa nwɔtwe ɛka ɛnum ho, na sɛn na sane fa ɛnan kaho. Wose wonte aseɛ, sɛn na wose wonte aseɛ?
- 342 Chn. : [All talking together Noise]
- 343 Tr. : Sɛ wo wɔ adeɛ nwɔtwe, adeɛ nwɔtwe, wo afa counter a kan ne nwɔtwe. Baako, mmeinu mmeensa, ɛnan, ɛnum, nsia, nson, nwɔtwe. Wei yɛ sɛn? ɛnum. Wo asane a kan ne ɛnum Baako, mmeinu mmeensa, ɛnan, ɛnum. Wei yɛ sɛn? ɛnan: ɛko, mmeinu, mmeensa, ɛnan. Wei nyinaa wo afa wo

- counters, wo akan ne ɛnum agu hɔ, na wo a kan ne nwɔtwe agu hɔ. Wo kan ne nyinaa wiei a, na wo akabomu. Na wo afiti aseɛ a kan ne, kan ma yen tie.
- 344 Chn. : [Inaudible].
- 345 Tr. : Kan no kese
- 346 Ampem. : **One**,
- 347 Tr. : Bra ha, bra ha. ɛye me sɛ bɛbia wo gyina no wo nhunu so. Ka woho. Kaho, ka woho. Kan ma yen tie.
- 348 Ampem. + Chn. : [Ampem does the action and the rest of the class do the counting]: **One, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen.**
- 349 Tr. : Wo nya sɛn?
- 350 Ampem : **Seventeen.**
- 351 Tr. : Twɛrɛ **seventeen** ma me hwɛ. Twɛrɛ **seventeen** wɔ blackboard no so ma me hwɛ
- 352 Ampem : [Writes on the blackboard].
- 353 Tr. : Sɛn nono?
- 354 Ampem : **Seventeen.**
- 355 Tr. : **Seventeen.** Yɛsɛ **seventeen** no sɛn na wo bɛ ɛdikan atwɛrɛ wɔha? **Seventeen** no sɛn na wo bɛ dikan atwɛrɛ wɔha? Kofi Amoako bra na bɛboa wo papa.
- 356 Chn. : Laughing
- 357 Tr. : **Seventeen** yi, sɛn na Kofi yɛbɛ twɛrɛ ɛwɔ ha?
- 358 Amoako : [Points to under the four].
- 359 Tr. : Gye twɛrɛ dɛɛ yɛbɛ twɛrɛ ahyɛ four no ase ma me hwɛ.
- 360 Chn. : Yiee! Yiee!
- 361 Tr. : Obia nmoa na ano na mo ngyae yiee, yiee no! Twɛrɛ ma yen hwɛ. Sɛn na wobɛ twɛrɛ hɔ? Boakye sɛn na yɛbɛ twɛrɛ aha? Mo mon-gyina nkyɛn. yɛbɛ twɛrɛ sɛn?
- 362 Boakye : Me twɛrɛ ha?
- 363 Tr. : Ane, sɛn na yɛbɛ twɛrɛ hɔ? Kofi gyina ha, gyina ha, Georgina Donkor bra.
- 364 Chn. : [All talking together].
- 365 Tr. : O! Yɛ no ntɛm. Sɛn na wobɛ twɛrɛ hɔ? Sɛn na wobɛ twɛrɛ hɔ? Fa ma me yɛ. Woso ka wɔm so ha. ɛɛ, O! Veronica bra. Gyina nkyɛn, gyina nkyɛn. Mo npene noha kakra.
- 366 Veronica : [Writes]
- 367 Tr. : Sɛn na wo twɛrɛ yɛ?
- 368 Veronica : **Seven.**
- 369 Tr. : Adɛn ntiara? Kɔ. Wobɛ twɛrɛ? Bra bɛ twɛrɛ yɛ.

Appendix 5 (26) TG: English

LESSON : TWENTY SIX

SCHOOL : U2

CLASS : P3

TEACHER : TG

SUBJECT : ENGLISH LANGUAGE (READING COMPREHENSION)

TOPIC : HOW AMA AND DEDE SPEND SUNDAYS

DATE : 14TH MARCH, 1996

1 Tr. : Class stand. Look up here. 'Get'

2 Chn. : Get.

3 Tr. : Get.

4 Chn. : Get.

5 Tr. : Housework.

6 Chn. : Housework.

7 Tr. : Housework.

8 Chn. : Housework.

9 Tr. : After.

10 Chn. : After.

11 Tr. : After.

12 Chn. : After.

13 Tr. : Breakfast.

14 Chn. : Breakfast.

15 Tr. : Breakfast.

16 Chn. : Breakfast.

17 Tr. : Early.

18 Chn. : Early.

19 Tr. : Early.

20 Chn. : Early.

21 Tr. : Quickly.

22 Chn. : Quickly.

23 Tr. : Quickly.

24 Chn. : Quickly.

25 Tr. : Bath.

26 Chn. : Bath.

27 Tr. : Bath.

28 Chn. : Bath.

29 Tr. : Sometime.

30 Chn. : Sometime.

31 Tr. : Sometime.

32 Chn. : Sometime.

33 Tr. : Get.

34 Chn. : Get.

35 Tr. : Get.

36 Chn. : Get.

37 Tr. : Housework.

- 38 Chn. : Housework.
 39 Tr. : Housework.
 40 Chn. : Housework.
 41 Tr. : After.
 42 Chn. : After.
 43 Tr. : After.
 44 Chn. : After.
 45 Tr. : Breakfast.
 46 Chn. : Breakfast.
 47 Tr. : Breakfast.
 48 Chn. : Breakfast.
 49 Tr. : Early.
 50 Chn. : Early.
 51 Tr. : Early.
 52 Chn. : Early.
 53 Tr. : Quickly.
 54 Chn. : Quickly.
 55 Tr. : Quickly.
 56 Chn. : Quickly.
 57 Tr. : Bath.
 58 Chn. : Bath.
 59 Tr. : Bath.
 60 Chn. : Bath.
 61 Tr. : Sometime.
 62 Chn. : Sometime.
 63 Tr. : Sometime.
 64 Chn. : Sometime.
 65 Tr. : Alright if you know you put up your hand then you pronounce the
 word. Listen to me, listen to me : 'get'.
 66 Chn. : Get.
 67 Tr. : Get.
 68 Chn. : Get.
 69 Tr. : Bath.
 70 Chn. : Bath.
 71 Tr. : Bath.
 72 Chn. : Bath.
 73 Tr. : Breakfast.
 74 Chn. : Breakfast.
 75 Tr. : Breakfast.
 76 Chn. : Breakfast.
 77 Tr. : Early.
 78 Chn. : Early.
 79 Tr. : Early.
 80 Chn. : Early.
 81 Tr. : After.
 82 Chn. : After.
 83 Tr. : After.

- 84 Chn. : After.
- 85 Tr. : Sometime.
- 86 Chn. : Sometime.
- 87 Tr. : Sometime.
- 88 Chn. : Sometime.
- 89 Tr. : Housework.
- 90 Chn. : Housework.
- 92 Tr. : Housework.
- 93 Chn. : Housework.
- 94 Tr. : Quickly.
- 95 Chn. : Quickly.
- 96 Tr. : Quickly.
- 97 Chn. : Quickly.
- 98 Tr. : Alright if you know you put up your hand. Boakye.
- 99 Boakye : After.
- 100 Tr. : Again.
- 101 Boakye: After.
- 102 Tr. : Again.
- 103 Boakye: After.
- 104 Tr. : [Points to a new word on the board and also nominates another child.]
- 105 Chd. : Sometime.
- 106 Tr. : Again.
- 107 Chd. : Sometime.
- 108 Tr. : Again.
- 109 Chd. : Sometime.
- 110 Tr. : Sometime.
- 111 Chd. : Sometime.
- 112 Tr. : Sometime.
- 113 Chd. : Sometime.
- 114 Tr. : Get.
- 115 Chn. : Get.
- 116 Tr. : Get.
- 117 Chn. : Get.
- 118 Tr. : Points to a new word on the board and calls Dekye
- 119 Dekye: Breakfast.
- 120 Tr. : Again.
- 121 Dekye: Breakfast.
- 122 Tr. : Again.
- 123 Chn. : Breakfast.
- 124 Tr. : Points to a new word on the board and calls Andrews.
- 125 Andrews: Quickly.
- 126 Tr. : Again.
- 127 Andrews: Quickly.
- 128 Tr. : Again.
- 129 Andrews: Quickly.

- 130 Tr. : Alright, now I will call the word then you come and point at the word. I will call the word: After, after, after. Alright, you come. After.
- 131 Chd. : [Goes to the board and points at the word after and says it as well as spells it.] After, a-f-t-e-r, after.
- 132 Tr. : After.
- 133 All Chn.: After.
- 134 Tr. : After, alright, now the next word; bath, bath, bath. ([Points to a child]).
- 135 Chd. : Bath.
- 136 Tr. : No go and point at the word bath.
- 137 Chd. : [Goes to the board and points at the word bath]
- 138 Tr. : Yes.
- 139 Chd. : [Says bath, spells it and says it again] Bath, b-a-t-h, bath.
- 140 Tr. : All of you.
- 141 Chn. : Bath, b-a-t-h, bath.
- 142 Tr. : The next word: Breakfast, breakfast, breakfast, breakfast. If you know put up your hand. Breakfast, breakfast.(points to a child).
- 143 Chd. : [Goes to the bb, points at the word, reads, spells and pronounces it again]: Breakfast, b-r-e-a-k-f-a-s-t, breakfast.
- 144 Tr. : Breakfast.
- 145 Chn. : Breakfast.
- 146 Tr. : All of you spell.
- 147 Chn. : Breakfast, b-r-e-a-k-f-a-s-t, breakfast.
- 148 Tr. : Early.
- 149 Chn. : Early.
- 150 Tr. : Early, early.
- 151 Chd. : Early.
- 152 Chn. : Early.
- 153 Chd. : e-a-r-l-y, early.
- 154 Chn. : Early, e-a-r-l-y, early.
- 155 Tr. : Quickly, quickly, quickly. The same line Quickly.
- 156 Chd : Quickly.
- 157 Chn. : Quickly.
- 158 Chd. : Quickly, q-u-i-c-k-l-y, quickly.
- 159 Chn. : Quickly, q-u-i-c-k-l-y, quickly.
- 160 Tr. : Quickly.
- 161 Chn. : Quickly.
- 162 Tr. : Quickly.
- 163 Chn. : Quickly.
- 164 Tr. : Q.
- 165 Chn. : Q.
- 166 Tr. : u.
- 167 Chn. : u.
- 168 Tr. : i.
- 169 Chn. : i.
- 170 Tr. : c.
- 171 Chn. : c.

- 172 Tr. : k.
 173 Chn. : k.
 174 Tr. : l.
 175 Chn. : l.
 176 Tr. : y.
 177 Chn. : y.
 178 Tr. : Quickly.
 179 Chn. : Quickly.
 180 Tr. : Quickly.
 181 Chn. : Quickly.
 182 Tr. : Get, get, get, get.
 183 Chn. : Get..
 184 Tr. : Alright, what word is that? What word is this? What word is this?
 Yes you.
 195 Chd. : Sometime.
 186 Tr. : What did he say?
 187 Chd. : Sometime.
 188 Tr. : Again
 189 Chd. : Sometime.
 190 Tr. : Sometime.
 191 Chn. : Sometime.
 192 Tr. : Sometime.
 193 Chn. : Sometime.
 194 Tr. : Alright, I said this word. What is this word. [Points to a child]
 195 Chd. : Get
 196 Chn. : Get.
 197 Chd. : g-e-t, get.
 198 Chn. : Get.
 199 Tr. : Listen, when you spell, pronounce the word. First you pronounce
 the word. When you have finish spelling you pronounce again. Yes.
 200 Chd. : g-e.
 201 Tr. : Listen, get.
 203 Chn. : Get.
 204 Tr. : Say get.
 205 Chn. : Get.
 206 Tr. : Get.
 207 Chn. : Get.
 208 Tr. : Get, g-e-t, get.
 209 Chn. : Get, g-e-t, get.
 210 Tr. : Alright, now sit down.
 211 Chn. : Thank you sir.
 212 Tr. : We are going to read from the board. When you have finished
 reading We read from the book: Mensah and Dede get up early on Sunday.
 213 Chn. : Mensah
 214 Tr. : No, no, listen to me: Mensah and Dede get up early on Sunday.
Then they do their housework quickly. After the housework, they have their
bath. Then they have their breakfast. We are going to read line by line. We

are six lines. We have six lines. This line is going to read first. You will read first. You, alright come. When you finish reading you will take the reading book and read from it.

215[1st line]Chd. : Mensah and Dede get up early on Sunday.

216 Chn. : Mensah

217 Tr. : No

218 Chd. : Then they do their housework quickly. After the housework, they have their bath. Then they have their breakfast.

219 Tr. : Clap for him.

220 Chn. : [Clapping]

221 Tr. : Alright you will take the reader and read.

222 Chn. : [Talking together, not audible.]

223 Tr. : Read and let us hear. Take the book up.

224 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework quickly. After the housework they have their bath. Then they have their breakfast.

225 Tr. : Alright, clap for him.

226 Chn. : [Clapping].

227 Tr. : This line, this line, this line. Nobody can read! Second line.

228) Chd. : Mensah and Dede get up early on Sunday. Then.... they do their housework quickly. After the housework, they, they, they

229 Tr. : Alright, who can help him with this word? Yes.

230 Chd. : Have.

231 Tr. : Yes.

232 Chd. : Have

233 Tr. : Yes.

234 Chd. : Their, their

235 Tr. : Alright, who can read this line? Who can read this line? Yes.

236 Chd. : Sometimes they have their bath.

237 Tr. : Yes.

238 Chd. : Housework

239 Tr. : No, no. He started from here: 'housework', then. This is, 'They', have, their bath. After the housework they have their bath. After the housework they have their bath. Read like that.

240 Chd. : After the housework they bath their bath.

241 Chn. : [Laughter]

242 Tr. : Yes, who will come and help him? Who will come and help him. Yes. Give it to him.

243 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework quickly. After, after the, after, after the housework, they have their bath. Then they have their breakfast.

244 Tr. : Alright clap for him.

245 Chn. : [Clapping].

246 Tr. : Come and take the reader. Take the book. Then read.

247 Chd. : Mensah and

248 Tr. : Here. Read from this side. Read from this side

- 249 Chd. : Mensah and Dede get up early on Sunday. Then, they do their housework quickly. After the, ...housework they do their bath.
- 250 Tr. : Mm, mm no, no. Here, read from this side.
- 251 Chd. : Then they have their bath.
- 252 Tr. : Is that correct? Alright put it down. Look here, that is it. Yes?
- 253 Chd. : They.
- 254 Tr. : Points to another child. Yes read.
- 255 Chd. : They, have, their bath.
- 256 Tr. : It is in the book like that. Read from the book. Read again.
- 257 Chd. : Mensah and Dede get up early on Sunday. They, they do their housework
- 258 Tr. : Open your mouth and speak louder, read louder.
- 259 Chd. : Mensah and Dede get up early on Sunday. They, then they do their housework quickly. After, the housework, af, after, after the housework they, they have their bath. Then they have their breakfast.
- 260 Tr. : Alright clap for him.
- 261 Chn. : [Clapping].
- 262 Tr. : Yes, who will also try? Who will also try? Go. Who will come and read? Who will come?
- 263 Chn. : [All talking together]
- 264 Tr. : Yes.
- 265 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework quickly. After the housework then they have their bath. Then they have their breakfast.
- 266 Tr. : Alright clap for him.
- 267 Chn. : [Clapping].
- 268 Tr. : Take and read? Read from this side. Take the book.
- 269 Chd. : Mensah and Dede
- 270 Tr. : Take the book.
- 271 Chd. : Wese fa.
- 272 Tr. : Keep quiet. Yes read.
- 273 Chd. : Mensah and Dede get up early on Sunday. Then they do, then they do their housework quickly. After the housework then they they have their bath. They have their breakfast.
- 274 Tr. : **Mm hum deen nono.** What is that word?
- 275 Chd. : Then they have their breakfast.
- 276 Tr. : Alright clap for him.
- 277 Chn. : [Clapping].
- 278 Tr. : Yes who is coming? Who is coming?
- 279 Chn. : Line weifo a.
- 280 Tr. : Not only this line. Anybody, anybody, anybody. Who will like to read? Come.
- 281 Chn. : [All talking together].
- 282 Tr. : Keep quiet. Alright what of this line, who is coming?
- 283 Chn. : [All talking together].
- 284 Tr. : Keep quiet. Look at the board.
- 285 Chd. : Mensah and Dede get up early on Sunday. They do their

- 286 Tr. : Then!
- 287 Chd. : Then they do their housework, quickly. Quickly after the housework, then they have their bath. They, they then they, have their breakfast.
- 288 Tr. : Read again. Don't rush? Don't rush? Read. Yes.
- 289 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework. Quickly, after the housework, after, after the housework they have their bath. They, then they have their breakfast.
- 290 Tr. : Alright clap for him.
- 291 Chn. : [Clapping].
- 292 Tr. : Alright everybody look up here say 'then'.
- 293 Chn. : Then.
- 294 Tr. : Then.
- 295 Chn. : Then.
- 296 Tr. : Then.
- 297 Chn. : Then.
- 298 Tr. : They.
- 299 Chn. : They.
- 300 Tr. : They.
- 301 Chn. : They.
- 302 Tr. : Have.
- 303 Chn. : Have.
- 304 Tr. : Have.
- 305 Chn. : Have.
- 306 Tr. : They have their bath.
- 307 Chn. : They have their bath.
- 308 Tr. : Then they have their breakfast.
- 309 Chn. : Then they have their breakfast.
- 310 Tr. : Alright go and take the book. After that you will read. After him you will read. Yes, no, no. Open this side.
- 311 Chd. : Yes sir.
- 312 Tr. : Why did you do this?....Penaha penaha, Yes, Mm hum!
- 313 Chd. : Mensah and Dede get up early on Sunday.
- 314 Tr. : Read from here. Yes.
- 315 Chd. : **Aha yi?**
- 316 Tr. : **εhe.**
- 317 Chd. : Then they do their housework quickly. After the housework they have their bath, bath. Then they do, then, then they have their breakfast.
- 318 Tr. : Alright clap for him.
- 319 Chn. : [Clapping].
- 320 Tr. : Alright, Yaw Kyem
- 321 Kyem: Mensah and Dede get up early on Sunday. Then they do their
- 322 Tr. : Keep quiet. Yes.
- 323 Kyem: They, they do their bath.
- 324 Tr. : Yes you come? Go back, Start.
- 325 Chd : Mensah and Dede get up early on Sunday. Then, then, then they, then they

- 326 Tr. : Yes, look go back.
- 327 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework quickly. After the housework, they, eh! they have their bath. Then they have their breakfast.
- 328 Tr. : Alright clap for her.
- 329 Chn. : [Clapping].
- 330 Tr. : Read (pointing to a child).
- 331 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework quickly. After the housework then they, then they
- 332 Tr. : **eno no yeden?**
- 333 Chd. : [No response].
- 334 Tr. : Alright, come to the board again. Read again.
- 335 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework quickly. After the housework, and, after the house
- 336 Tr. : Where is after? Find us after, after, after, where is the after?.
- 337 Chn. : Sir, **menee**.
- 338 Tr. : Alright,
- 339 Chd. : **Mo mua mo ano ye**
- 340 Tr. : Yes you. Everybody look at him.
- 341 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework quickly. After the housework they have their bath. Then they have their breakfast.
- 342 Tr. : Clap for him.
- 343 Chn. : [Clapping].
- 344 Tr. : Alright, take the book. Have you read before?
- 345 Chn. : Sir **wa be kan bi**.
- 346 Tr. : Oh! That is that Alright who is coming? Who is coming? Yes.
- 347 Chd. : Sir!
- 348 Tr. : Yes.
- 349 Chd. : **Nnora wɔ no Yaw Boateng kan bi.**
- 350 Tr. : After Yaw Boateng you will come. After Yaw Boateng you will come and read.
- 351 Yaw : Mensah and Dede get up early on Sunday. Then they do their breakfast. Ee! eyi
- 352 Chn. : [Laughter]
- 353 Yaw : Housework
- 354 Tr. : Keep quiet.
- 355 Yaw : Quickly.
- 356 Tr. : What is this word? How do you pronounce this word?
- 357 Chd. : Have, eh! after.
- 358 Tr. : [Points to another child]
- 359 Chd. : After.
- 360 Chd. : Then.
- 361 Tr. : Who said then?
- 362 Chd. : **Me**
- 363 Tr. : [Points to housework]
- 364 Chd. : Housework.

- 365 Chn. :[All calling] sir, sir, teacher.
- 366 Tr. : We will only take pupil by the row. Yes.
- 367 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework quickly. After the housework,... they... they... then
- 368 Tr. : Keep quiet. Yes someone. Yes.
- 369 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework quickly. After the housework they have their bath. Then they have their breakfast.
- 370 Chd. : Hai! Aden nti na mo pe kasa saa?
- 371 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework quickly. After the housework they have their bath. Then they have their breakfast.
- 372 Tr. : Alright clap for him.
- 373 Chn. : [Clapping].
- 374 Tr. : So you only like to clap for somebody you don't want somebody to clap for you. Mo deɛ sɛ moɛ bɔ mo nsam ama obi na moɛ. Sɛ obi bɛbɔ ne nsam ama mo deɛ mo nɛ. You will read? Alright keep quiet.
- 375 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework quickly. After the housework.
- 376 Tr. : After the housework. After the housework
- 377 Chd. : After the housework.
- 378 Tr. : Ah! where is after?
- 379 Chd. : Mensah and Dede, Mensah and Dede get up early on Sunday. Then they do their housework quickly. After the housework then they do their bath.
- 380 Tr. : Alright, thank you. Yes (pointing to another child)
- 381 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework quickly. After the housework they, they have their bath. They, then they have their breakfast.
- 382 Tr. : Alright, listen, listen everybody. Listen, alright stand up. Look up here: Mensah and Dede get up early on Sunday. Then they do their housework quickly. Then they do their housework quickly. After the housework, they have their bath. Then they have their breakfast. Look up here everybody. Look here there is no comma or full stop here, so here you don't read like this: 'Then they do their housework. Quickly'. No. "Then they do their housework quickly". After the housework, they have their bath. Then they have their breakfast. It's continuous. We don't stop. Only where you see this. This we call it full stop. It means when you reach there rest. When you come to this side: comma. When you reach there, rest a little. Se wo hunu wei yi a, 'full stop' ɛkyerɛ sɛ, sɛ wo duru hɔ nom a, gye wo ahome. Wo hunu wie ye a, yɛfrɛ no 'comma', wo duru hɔ nom a gye wo home kakra. Mo hwɛ sɛdɛɛ me si twano no. Bɛbia yei no sei wɔno na magye me home. Bɛbia wei no wɔno na magye me home kakra. Mensah and Dede get up early on Sunday. Have you seen it? So you have to rest here. Then they do their housework quickly. After the housework, they have their bath. Then they have their breakfast. Where there is a full stop, full

- stop you have to rest. Where there is a comma, you have to rest a little.
 Alright, last person. I want only one person. Yes
- 383 Chd. : Mensah and Dede get up early on Sunday. Then they do their
housework. Quickly. After the housework then have
- 384 Tr. : What is this word? This word is what?
- 385 Chd. : They. They have their bath. Then they have their breakfast
- 386 Tr. : Everybody say: 'Have'
- 387 Chn. : Have.
- 388 Tr. : Have.
- 389 Chn. : Have.
- 390 Tr. : Have.
- 391 Chn. : Have.
- 392 Tr. : They.
- 393 Chn. : They.
- 394 Tr. : They.
- 395 Chn. : They.
- 396 Tr. : They.
- 397 Chn. : They.
- 398 Tr. : Then.
- 399 Chn. : Then.
- 400 Tr. : Then.
- 401 Chn. : Then.
- 402 Tr. : Alright who will come and try? Portia come. Go back, go back.
- 403 Portia : Mensah and Dede get up early on Sunday. They
- 404 Tr. : What is this word? [pointing to a child.]
- 405 Chd. : Then.
- 406 Chd. : Mensah and Dede get up early on Sunday. Then they do their
housework quickly After the housework, they have their breakfast.
- 407 Chn. : εnoa no no?
- 408 Tr. : What is this word?
- 409 Chn. : Aha!
- 410 Tr. : Keep quiet
- 411 Tr. : What is this word? What is that word?
- 412 Chd. : Mensah and Dede get up early on Sunday.
- 413 Chn. : [Whisper to the reader] 'then'
- 414 Chd. : Then they do their housework quickly After the housework, they
have their bath
- 415 Chd. : Sir.
- 416 Tr. : Yes
- 417 Chd. : [Moves towards the blackboard]
- 418 Tr. : No, no, call the word for her.
- 419 Chd. : Then
- 420 Chd. : Then. Then the
- 421 Chn. : Do.
- 422 Chd. : Hai!
- 423 Tr. : Yes Sam

- 424 Chd. : Mensah and Dede get up early on Sunday. Then they do their housework
- 425 Tr. : Speak louder.
- 426 Chd. : **Ka no kese**
- 427 Chd. : Then they do their house work quickly. After the housework.

Appendix 5 (27) TH: English

LESSON	:	TWENTY SEVEN
SCHOOL	:	ZONGO PRIMARY
CLASS	:	P 4.
TEACHER	:	" TH "
SUBJECT	:	ENGLISH LANGUAGE
ASPECT	:	READING COMPREHENSION
TOPIC	:	CLEANINESS
DATE	:	11TH MARCH 1996

- 1 Tr. : em. Writes lesson heading and lists key words on the
bb. Turns round, eh.
- 2 Chn. : Talking together
- 3 Tr. : Right em. Stand up.
- 4 Chn. : Pupils stand
- 5 Tr. : Sit down.
- 6 Chn. : Pupils sit
- 7 Tr. : Up.
- 8 Chn. : Pupils stand
- 9 Tr. : Down.
- 10 Chn. : Pupils sit.
- 11 Chn. : Talking together.
- 12 Tr. : Now you repeat after me: "Food". All of you.
- 13 Chn. : Food.
- 14 Tr. : Food.
- 15 Chn. : Food.
- 16 Tr. : Clean.
- 17 Chn. : Clean.
- 18 Tr. : Room.
- 19 Chn. : Room.
- 20 Chn. : Water.
- 21 Chn. : Water.
- 22 Tr. : Water.
- 23 Chn. : Water.
- 24 Chn. : [Noise].
- 25 Tr. : Some of you are saying /ɔ:tə/. No. It is water.
- 26 Chn. : Water.
- 27 Tr. : Again.
- 28 Chn. : Water.
- 29 Tr. : Drink.
- 30 Chn. : Drink.
- 31 Tr. : Drink.
- 32 Chn. : Drink.
- 33 Tr. : Foolish man. Window.
- 34 Chn. : Window.
- 35 Tr. : Window.

36	Chn.	: <u>Window</u> .
37	Tr.	: <u>Window</u> .
38	Chn.	: <u>Window</u>
39	Tr.	: Now lets start again.
40	Chn.	: <u>Food</u>
41	Tr.	: Again.
42	Chn.	: <u>Food</u> .
43	Tr.	: Points to "food" on bb.
44	Chn.	: <u>Food</u> .
45	Tr.	: Points to "drink"
46	Chn.	: <u>Drink</u>
47	Tr.	: Points again to "drink"
48	Chn.	: <u>Drink</u>
49	Tr.	: Points to "room"
50	Chn.	: <u>Room</u>
51	Tr.	: Points to "water".
52	Chn.	: <u>Water</u>
53	Tr.	: [Points again to "water".]
54	Chn.	: <u>Water</u> .
55	Tr.	: [Points to "drink"].
56	Chn.	: <u>Drink</u> .
57	Tr.	: [Points to "window"]
58	Chn.	: <u>Drink /window</u> [Simultaneous production]
59	Tr.	: Again.
60	Chn.	: <u>Window</u>
61	Tr.	: [Points again to "window"]
62	Chn.	: <u>Window</u>
63	Tr.	: [Points to "room"]
64	Chn.	: <u>Room</u>
65	Tr.	: [Points to "drink"].
66	Chn.	: <u>Drink</u>
67	Tr.	: [Points again to "room"].
68	Chn.	: <u>Room</u>
69	Tr.	: [Still points to "room"].
70	Chn.	: <u>Room</u> .
71	Tr.	: [Points to "clean"]
72	Chn.	: <u>Clean</u>
73	Tr.	: [Points again to "window"]
74	Chn.	: <u>Window/clean</u> (simultaneous production)
75	Tr.	: Look at the board. Yes.
76	Chn.	: <u>Window</u>
77	Tr.	: [Points to "room"]
78	Chn.	: <u>Room</u>
79	Tr.	: [Points again to "room"].
80	Chn.	: <u>Room</u>
81	Tr.	: [Points again to "water"]
82	Chn.	: <u>Water</u> .

- 83 Tr. : [Still points to "water" on bb.]
 84 Chn. : Water.
 85 Tr. : [Points to "drink"]
 86 Chn. : Drink
 87 Tr. : [Again to "water"]
 88 Chn. : Water
 89 Tr. : Mm, Okay. Now we all eat every day. We all eat everyday and we eat food. So, em we all. Kwaku eats everyday. Now, what is he eating? You see he is eating some food. He is eating some food. Now when you go to home. When you close in the afternoon, when you go home, by all means our mothers give us some food and this food will help us to grow. So when we talk of food we mean something we eat into our stomach. Now on.
- 90 Chn. : [Noise]
 91 Tr. : When we also see that our room is dirty, the room. You clean our room. To clean. When we see that our house is dirty or our compound is dirty we can clean the compound and then room. We are in our room. [Points to the word "room"]. This is, which class is this? P4 classroom. This is classroom, [pointing to "room"]. [Points to Water] Now water. You always drink water. This morning some of you have drank water so we drink water everyday. we drink water everyday or I drink water everyday. [Points to "drink"] And then drink. I am drinking. I am drinking. [Points to "window"] Now window. Gyimah close our window lets see. Close the window.
- 92 Gyimah : [Closes window].
 93 Tr. : What is he doing? He is. He is closing the window or he is shutting the window. Alright open it.
- 94 Gyimah. : [Opens the window].
 95 Tr. : That is window, window.
 96 Chn. : [Noise]
 97 Tr. : Now open page on
 98 Chn. : [Noise]
 99 Tr. : We are on between and then from.
 100 Chn. : [Noise]
 101 Tr. : **Bue ha**. Page six, page six.
 102 Chn. : [Noise]
 103 Tr. : Unit two. Page six. Unit two. Lets take two minutes to read silently. **Kan no wɔ wo tiri mu.**
- 104 Chn. : Reading silently
 105 Tr. : Right stop. Now when you look at the pictures you see two houses. One is a very clean house and the other one is a very dirty eh village. We have a house and a village.
- 106 Chn. : [Noise]
 107 Tr. : Now, unit two. Be clean and strong.. Lets read. Mary can you help us? Read from the first paragraph . Look into your books as she reads. Read. Lets hear you.

- 108 Mary : Mr and. Mr and Mrs Fosu live in a clean house. Their children are Kofi and Afi. Mrs Fosu and Afi sweep the house everyday. Kofi sweeps the rooms. Mrs Fosu covers the rubbish. She also covers all their food and water. Mr Fosu opens all the windows and fresh air comes in.
- 109 Tr. : Right, is alright. Now she was reading about some people. Now what name did you hear? Mary was reading. Just now she was reading. She has mentioned whose names? What name did you hear? Gyimah.
- 110 Gyimah : Mr. Kofi and
- 111 Tr. : I want only the name So we have heard of Mr. Kofi and what other name did you hear? What other name? **ɛdin foforɔ bɛn na Mary bɔ yɛ ?** We have heard Mr Kofi and what other name did you hear? (points to a child)
- 112 Chd. : Afi
- 113 Tr. : Kofi and Afi. She mentioned a certain woman's name.
- 114 Chd. : Mrs. Fosu
- 115 Tr. : Mrs. Fosu. So we are reading about Mr. and Mrs Fosu. Now Atta Adu read. Lets hear you. Begin from
- 116 Chn. : [Noise]
- 117 Tr. : Keep quiet. Listen to Atta Adu.
- 118 Atta : Mr. and Mrs Fosu
- 119 Tr. : Look into your books as he reads. Go on
- 120 Atta : Mr. and Mrs Fosu works ...
- 121 Tr. : Now who can pronounce that word? l-i-v-e. Oppong.
- 122 Oppong : Leaving.
- 123 Tr. : No, no, no. Who can pronounce it better? Yes?
- 124 Chd. : Live
- 125 Tr. : Live. All of you.
- 126 Chn. : Live
- 127 Tr. : Live
- 128 Chn. : Live
- 129 Tr. : Again
- 130 Chn. : Live
- 131 Tr. : So Atta Adu begin again
- 132 Atta : Mr.
- 133 Tr. : Louder. louder. **Ka no kese**
- 134 Atta : Mr and Mrs Fosu live in a
- 135 Tr. : c-l-e-a-n, c-l-e-a-n, c-l-e-a-n. Now look at the board. It is the same word. Now Danso pronounce it.
- 136 Danso : Clean
- 137 Tr. : Again
- 138 Danso : Clean
- 139 Tr. : All of you.
- 140 Chn. : Clean
- 141 Tr. : Clean
- 142 Chn. : Clean

- 143 Tr. : Okay, Atta Adu go on.
 144 Atta : Clean.. clean house
 145 Tr. : Louder, louder.
 146 Atta : Louder.
 147 Tr. : **Atta ka no kɛse**
 148 Chn. : **Ka no kɛse**
 149 Atta : Clean house! There..
 150 Tr. : **Gyae.** Oppong Comfort read. Start afresh.
 151 Oppong : Mr and Mrs Fosu live in
 152 Tr. : Clean.
 153 Oppong : In a clean house. Their children are Kofi and Afi.
 154 Tr. : Right stop. Lets all join and read. All of you join and read. Go!
 155 Chn. : Mr and Mrs Fosu live in a clean house
 156 Tr. : Their
 157 Chn. : Their children are Kofi and Afi.
 158 Tr. : Stop there . Now Gyimah read.
 159 Gyimah : Mr and Mrs Fosu live in a clean house.
 160 Tr. : Start again.
 161 Gyimah : Mr and Mrs Fosu live in a clean house. Their children are Kofi and Afi.
 162 Tr. : Good. Who else can read up to that point?
 163 Chn. : [Noise]
 164 Tr. : Mhum. Deborah read.
 165 Deborah : Mr and Mrs Fosu /laifs/(for lives)
 166 Chn. : (Laughter)
 167 Tr. : Stop. The word is live. Mr and Mrs Fosu live. Go on
 168 Deborah : Mr and Mrs Fosu live in a ..
 169 Tr. : ɛm. Now let me come to you. Now read Gyamfi. Mr and Mrs Fosu. Go!
 170 Gyamfi : Mr and Mrs
 171 Tr. : Louder, **ka no kɛse.** Mr and Mrs, Fosu, live.
 172 Chn. : [Noise].
 173 Tr. : **Hai!** Mary read. Listen to Mary again.
 174 Mary : Mr and Mrs Fosu live in a clean house. Their children are Kofi and Afi. Mrs Fosu and Afi live, ah! Mrs Fosu and Afi sweep the house everyday. Kofi sweeps the rooms. Mrs Fosu covers the rubbish. She also covers all their food and water. Mr Fosu opens all the windows for fresh air to come in. They keep their bodies clean, they clean their, clean their teeth and have their bodies, body everyday
 175 Tr. : Wait, wait. They clean their teeth and have their bath everyday. Read that portion again. They clean their teeth
 176 Mary : [lost]
 177 Chd. : **Aha, aha.**
 178 Tr. : They
 179 Chn. : **Aha, aha**

- 180 Tr. : Read from there. Mary read.
- 181 Mary : They clean their teeth and have
- 182 Mary+Tr. : Their bath everyday.
- 183 Tr. : Let us all read up to where eh Mary have reached. Mr and Mrs Fosu live in a clean house. Their children are Kofi and Afi. Mrs Fosu and Afi sweep the house everyday. Kofi sweeps the rooms. Mrs Fosu covers the rubbish. She also covers all their food and water. Mr Fosu opens all the windows and fresh air comes in. Lets start and come to this end. Mr and Mrs Fosu .Go!
- 184 Chn. : Mr and Mrs Fosu live in a clean house. Their children are Kofi and Afi. Mrs Fosu and Afi sweep the house everyday. Kofi sweeps the rooms.
- 185 Tr. : The rubbish full stop. Mrs Fosu covers the rubbish. Go. Read again.
- 186 Chn. : Mrs Fosu covers the rubbish
- 187 Tr. : She also
- 188 Chn. : She also covers all their food and water. Mr Fosu opens all the windows and fresh air comes in.
- 189 Tr. : Lets stop here. Now eh mm. You see we are talking of cleanliness. That is when we are clean, eh, we shall not grow sick. but when you are dirty you all the time be sick. So, eh, this unit is telling us to be clean all the time because if you are dirty even your friends will not like to walk with you. Even your father will not like you. Your mother will also not like you. So, so all the time you have to be clean. It means you are going to be strong all the time. Now let us look at the first house. You see many things there. What are the things? What are some of the things which you see there? **Hwε εfie kamakama no. Yε hunu nnoɔma bebereε εwɔ wɔ. εbi ne nea εhɔ hin ara na yehunu wɔ hɔ?** Tell us some of the things you see. Try a little English. εε hen Mary. What do you see there?
- 190 Mary : Flowers
- 191 Tr. : Flowers. Good. You see flowers. What other things do you see in the house? Nkrumah.
- 192 Nkrumah : Trees.
- 193 Tr. : Yes, you see trees also there. Good. What other things do you see? Bio.
- 194 Bio. : water
- 195 Tr. : Good. You see water also in the house. Any other thing you see in the house? Boateng.
- 196 Boateng : **Ankorε**
- 197 Chn. : **Laughter amid shouts of ankore ankore !**
- 198 Tr. : **Ankorε . Okay! We also call it barrel. All of you say it.**
- 199 Chn. : Barrel
- 200 Tr. : Barrel b-a-r-r-e-l. Alright. Spell it.
- 201 Chn. : b-a-r-r-e-l.
- 202 Tr. : //.

203 Chn. : /I/.
 204 Tr. : Right. Any other thing do you see in the house? eh,
 Atta Adu. Any other thing you see in the house?
 205 Atta : Window
 206 Tr. : Window. Good. Gyimah.
 207 Gyimah : Door.
 208 Tr. : Door. You see a door, doors, windows, any other
 thing? Any other thing do we see in the house.
 209 Chn. : [Noise]
 210 Tr. : Mhum Nkrumah.
 211 Chn. : Veranda
 212 Tr. : Veranda. Very good. Veranda. All of you say it.
 213 Chn. : Veranda
 214 Tr. : Veranda
 215 Chn. : Veranda
 216 Tr. : Alright this is the Veranda Nkrumah has been talking
 about. We all know veranda. Any other thing? Yes Danso.
 217 Danso : Wall
 218 Tr. : Wall, all of you.
 219 Chn. : Wall
 220 Tr. : Wall
 221 Chn. : Wall
 222 Tr. : Right. Who can spell wall? Well, it begins with "w"
 Mary.
 223 Mary : W-a-l-l.
 224 Tr. : W-a-l-l, or who can spell it? Don't say eh the double
 but lets spell it right and see. She is correct but you can spell it
 another way. Wall. Prempeh.
 225 Prempeh : W-a- a-
 226 Tr. : No, Yes Atta
 227 Atta. : W-al-l.
 228 Tr. : Very good, w-a-l-l. Wall. Any other thing do we see,
 Do we see in the house?
 229 Chn. : [Noise]
 230 Tr. : Ah Gyimah would want to tell us something. Good.
 231 Gyimah. : Bucket.
 232 Tr. : Bucket. All of you
 233 Chn. : Bucket
 234 Tr. : Again
 235 Chn. : Bucket
 236 Tr. : You all Know bucket because when we eh in the
 morning you go to the river side to fetch water, you usually go there
 with buckets.
 237 Chn. : [Noise]
 238 Tr. : Now lets go to the dirty village. The dirty village. You
 didn't mention people. There are also people in the house. Now lets
 go to the dirty village. What do we see there? In the dirty village. ee

- εkuro nu a εgu fa ha no εh w fi. eden na ye hunu εh? Atta Adu.
- 239 Adu. : **Akok**.
- 240 Tr. : Now who can tell us the English name for **akok**. All of you say it
- 241 Chn. : Fowl/cock/hen. (simultaneous production)
- 242 Tr. : One by one. If you know it raise up your hand. Yaw Boateng
- 243 Chd. : Yaw Boateng teacher εfre w no wonte?
- 244 Tr. : Esther Boateng. English word for **akok**
- 245 Esther : Hawk
- 246 Tr. : No. Hawk. What is the Twi name for Hawk? Who can tell me hawk? εε he
- 247 Chd. : **Akok bεmba**
- 248 Tr. : No, no, no
- 249 Chn. : Teacher, Sir, sir, teacher.
- 250 Tr. : Wait. Don't call me. Hawk is a certain bird in the air which always catches εh hen and their children. We want the Twi name for it εε
- 251 Chd : **Akroma**.
- 252 Tr. : **Akroma** is hawk. **Me pe akok borfo. Akok baa.**
- 253 Chn : [Noise]
- 254 Tr : Right
- 255 Chd : Hen.
- 256 Tr. : Hen, all of you.
- 257 Chn. : Hen!
- 258 Tr. : Is too much. Hen again.
- 259 Chn : Hen
- 260 Tr : What about **akok nini**?
- 261 Chn : [Noise]
- 262 Tr. : **Nti**
- 263 Nti. : Hawk
- 264 Tr. : No. Hawk is **akroma**. Yes Oppong
- 265 Oppong : Cock
- 266 Tr : Cock. all of you.
- 267 Chn : Cock.
- 268 Tr. : Again. Who can spell it for us? Who can spell it for us? εm
- 269 Chn : [Noise].
- 270 Tr : **Wo ara mβε hu wo mβε bu**. Who can spell it for us? εm Gyimah.
- 271 Gyimah : B-b-a-k
- 272 Chn. : [Noise] and laughter.
- 273 Tr. : No
- 274 Chn. : Laughter.

- 275 Tr. : Anybody can try again? Anybody? Yes Oppong.
 276 Oppong : C-o-k
 277 Tr. : Mary
 278 Mary : C-a-o-k
 279 Tr. : No
 280 Chn. : [Noise]
 281 Tr. : Right lets go to the village again. Lets go to the village. What other things do you see in the village?
 282 Chn. : [Noise]
 283 Tr. : Mhum
 284 Chd. : Pipe
 285 Tr. : I mean the dirty village. Do you see pipe there? Lets see. Yes there is pipe. There is pipe. Any other?
 286 Chd. : Window.
 287 Tr. : Window, window is also there.
 288 Chn. : [Noise]
 289 Chd. : Door
 290 Tr. : Door, door eh Karikari?
 291 Karikari : /goutð /.
 292 Tr. : Say it louder.
 293 Karikari : /goutð/
 294 Tr. : That is /gʌtð/, /gʌtð/. All of you. /gʌtð/..
 295 Chn. : /gʌtð/..
 296 Tr. : Now when we go to Kumasi. Listen, when we go to Kumasi. At time when you are crossing from a street to the other end you have to jump because there is a gutter there. If you are not careful and you fall in either your, eh, going to hurt yourself or you will be sent to hospital. Any other thing?
 297 Chd. : Two boys.
 298 Tr. : Say it again
 299 Chd. : Two boys
 300 Chn. : [Laughter]
 301 Tr. : Who heard it
 302 Chd. : Two boys!
 303 Tr. : Two boys? Yes there are two boys also in the village. Right, so let us read the eh paragraph again. Let us be free with the reading. Let us all join again to read. Mr and Mrs Fosu. Right, all of you read
 304 Chn. : Mr and Mrs Fosu live in a clean house.
 305 Tr. : Right, group one read. Group one. Mr and Mrs Fosu live in a clean house
 306 Group 1. : Mr and Mrs Fosu live in a clean house
 307 Tr. : I will read it again. I read again. Mr and Mrs Fosu. Go!.
 308 Group 1. : Mr and Mrs Fosu live in a clean house.
 309 Tr. : Group two.
 310 Group 2. : Mr and Mrs Fosu live in a clean house.
 311 Tr. : Group three.

- 312 Group 3. : Mr and Mrs Fosu live in a clean house.
 313 Tr. : Again
 314 Group 3. : Mr and Mrs Fosu live in a clean house.
 315 Tr. : Again
 316 Group 3. : Mr and Mrs Fosu live in a clean house.
 317 Tr. : That's right.
 318 Chn. : [Laughter]
 319 Tr. : Group four.
 320 Group 4. : Mr and Mrs Fosu live in a clean house.
 321 Tr. : Again
 322 Group 4. : Mr and Mrs Fosu live in a clean house.
 323 Tr. : Good. Group five.
 324 Group 5. : Mr and Mrs Fosu live in a clean house.
 325 Tr. : He again. Group five.
 326 Group 5. : Mr and Mrs Fosu live.
 327 Tr. : In a clean house.
 328 Group5. : In a clean house.
 329 Tr. : Right, close your books. Let us do a little dictation.
 close your books. Let us do a little dictation. Now spell "in". If you
 know it raise up your hand. "in". Monica, yes.
 330 Monica : I-n, in
 331 Tr. : I-n, in. That's correct. Eight spell house, house, your
 own house that you live in. Spell it. House. Mary.
 332 Mary : H-o-u-s-e, house.
 333 Tr. : Fine. All of you lets spell it. Go!
 334 Chn. : H-o-u-s-e.
 335 Tr. : Pronounce it first.
 336 Tr+Chn. : House
 337 Chn. : H-o-u-s-e.
 338 Tr+Chn. : House
 339 Tr. : Right. And, and, and, and, and. It begins with /a/ and.
 Ofori Francisca
 340 Ofori: /a/
 341 Tr. : Louder
 342 Ofori: /ɒn/ a-n, /ɒn/.
 343 Tr. : No. /ɒnd/. Oppong.
 344 Oppong : /ænd/, a-n-d /ænd/.
 345 Tr. : All of you.
 346 Chn. : /ænd/ a-n-d. /ænd!/.
 347 Tr. : Is too much. Right. Lets go to another one. The, the.
 The word "The". Bio.
 348 Bio. : T-h-e. The.
 349 Tr. : First pronounce the word. Spell it. After, then you
 pronounce it again. "The". T-h-e, the. Right let us go to another one.
 "Day, day. It begins with /d/. Day, day. Yes Robert.
 350 Robert : /d/
 351 Tr. : Pronounce it first

- 352 Robert : Day, d-a-y. Day.
 353 Tr. : Right. All of you. "day".
 354 Chn : Day, d-a-y. Day.
 355 Tr. : Good. That is day. Now look at the board and tell me this word. Now m-r-o-o. I have spelt it wrongly. Somebody should spell it correctly and at the same time me the word. Monica, yes.
 356 Monica : Room, r-o-o-m, room.
 357 Tr. : Room, all of you spell it.
 358 Tr+ Chn : Room.
 359 Chn. : R-o-o-m, room.
 360 Tr. : Look at another one.(Teacher writes: 'krind' on the board. Yes I have this one also k-r-i-n-d. It is wrong. Let us correct it. em Abigail.
 361 Abigail : Drink
 362 Tr. : Again
 363 Abigail : Drink
 364 Tr. : Is she correct?
 365 Chn. : Yes.
 366 Tr. : Yes Let us spell it.
 367 Abigail : d-r-i-n-k.
 368 Tr. : Spell it again.
 369 Abigail : /d/
 370 Tr. : Pronounce it first.
 371 Abigail : Drink, d-r-i-n-k, drink.
 372 Tr. : All of you, drink.
 373 Chn. : Drink d-r-i-n-k, drink.
 374 Tr. : Another one, another one, another one. w-s-e-e-p, w-s-e-e-p. Always Mary, Mary, Mary. Yes Agyei!
 375 Agyei : Sleep.
 376 Tr. : Again.
 377 Agyei : Sleep.
 378 Tr. : Louder
 379 Agyei : Sleep.
 380 Tr. : You are coming, yes.
 381 Agyei : Sleep.
 382 Tr. : No. no, no. eh, Comfort.
 383 Comfort : Sweep.
 384 Tr. : All of you.
 385 Chn. : Sweep.
 386 Tr. : Alright, spell it all of you. Sweep.
 387 Chn. :Sweep, s-w-e-e-p, sweep.
 388 Tr. : This is the correct spelling. Alright last one. Right, hwε seesei deε eyε din kakra ba b-b-i-r-u-s-h. Now when you come to the classroom. Let me give you an idea. When you come to your classroom and you sweep the room, sweep the room, you, you, you collect certain things from the room and then throw it somewhere. When your room is dirty and you sweep you by all

means you will get something and that something you usually throw it away. Oppong can you try? Lets see.

389 Oppong : Rubbish.

390 Tr. : Good. Clap for her.

391 Chn. : [Clapping].

392 Tr. : That is rubbish all of you.

393 Chn. : Rubbish

394 Tr. : Again.

395 Chn. : Rubbish

396 Tr. : Se ye pra ye dan mu a, ye dan mu aye fi. Na ya pra no, wohunu se eya ye sisa, yeboaboa wura no ano. na ye kɔ tu guo!

397 Chn. : Yes sir.

398 Tr. : ehe. That is rubbish. ehe wohu, that is rubbish. Let spell it. Rubbish. All of us let us spell it and see.

399 Chn. : R-u-b-b-i-s-h.

400 Tr. : Again

401 Tr+Chn : Rubbish

402 Chn. : Rubbish, r-u-b-b-i-s-h, rubbish.

Appendix 5 (28) TH: Mathematics.

LESSON : TWENTY EIGHT
SCHOOL : ZONGO PRIMARY
CLASS : P 4.
TEACHER : " TH "
SUBJECT : MATHEMATICS
TOPIC : TELLING THE TIME
DATE : 11TH MARCH 1996

- 1 Tr. : Eh, who can tell me today's date? Today's date.
- 2 Chd. : 10th, 10th Today's date is 10th March, 1996.
- 3 Tr. : No, Yes.
- 4 Chd. : Monday 11th March, 1996.
- 5 Tr. : Very good. Today's date is 11th March, 1996 and it is Monday
- 6 Chn. : [Noise].
- 7 Tr. : Class stand, sit down, stand up, sit down. How many hands has a clock? A wall clock or any other watch. How many hands has it got?
- 8 Chd. : Three hands.
- 9 Tr. : All of you. How many hands?
- 10 Chn. : Three hands.
- 11 Tr. : Yes, let us try to name them. The first one is...
- 12 Chd. : Minute.
- 13 Tr. : Minute?
- 14 Chd. : Minute hand
- 15 Tr. : Good. Yes, a minute hand. Another one. Ofori
- 16 Ofori : Hour hand.
- 17 Tr. : Hour hand. And then the last one, Mhum.
- 18 Chd. : Second hand
- 19 Tr. : Second hand. Very good. These are the three hands we have. The last Friday I also said when the second hand also goes round the clock, how many seconds does it make.
- 20 Chd. : Sixty.
- 21 Tr. : Sixty what?
- 22 Chd. : Sixty seconds
- 23 Tr. : Sixty seconds. Very good. Now when the minute hand also goes round the clock how many minutes has it done?
- 24 Chd. : Hour
- 25 Tr. : No. The minute hand when goes round the clock how many minutes, eh, minutes has it done?
- 26 Chd. : One minute. One minute.
- 27 Chd. : One hour.
- 28 Tr. : One hour. Nkrumah was correct but I wanted somebody to prove it. When it goes round the clock it has done one hour. Then

- when we get our one hour, lets move on. Now how many hours do you think will give us one day? Last week we came up to an hour. We are now moving to a day. How many hours will give us one day?
- 29 Chd. : Sixty hours
- 30 Tr. : No
- 31 Chd. : Twenty four hours.
- 32 Tr. : Very good. Clap for him.
- 33 Chn. : [Clapping].
- 34 Tr. : Twenty four hours give us one day. Twenty four hours give us one day. Now, how many days will give us one week? How many days will give us one week?
- 35 Chd. : Seven weeks
- 36 Tr. : No. I'm talking of days.
- 37 Chd. : Seven days.
- 38 Tr. : Seven days. All of you; seven days.
- 39 Chn. : Seven days
- 40 Tr. : That is one week. Now how many weeks should give us one month?
- 41 Chd. : Four weeks.
- 42 Tr. : Say it louder
- 43 Chd. : Four weeks!
- 44 Tr. : Four weeks make one month. Four weeks make one month. Then how many months give us one year? How many months will give us one year? Now, all we need, eh months. We have, if we count from one, two, we have a certain months that will give us one year. How many months?
- 45 Chd. : Twelve months
- 46 Tr. : Twelve months give us one year. Alright name one of the months. Name one of the months. Currently we are in March. What other month do you know? We have twelve months. One of them is called March. What's the name of other months? For example, I know of October. Any other month you know? Always when you shout January, February so, so and so tell us one of them.
- 47 Chd. : October.
- 48 Tr. : I've said it. Say another one. Any other month? Alright, let us recite January, February....go!
- 49 Chn. : January, February, March, April, May
- 50 Tr. : Stop. Name one of them
- 51 Chd. : June
- 52 Tr. : Say it louder
- 53 Chd. : June!
- 54 Tr. : June. Any other month? Any other month? From June where do we go? From June where do we go? Yes.
- 55 Chd. : July.
- 56 Tr. : Say it louder.
- 57 Chd. : July!

Tr. : July. Alright jump from July and count two. Jump from July, miss the one after July. Then leave after

58 Chd. : August

59 Chd. : September

60 Tr. : Very good. The last month of the year tell me the name. The last month of the year. The last month of the year. Yes

61 Chd. : December

62 Tr. : December, very good. December. Now we can go on with our work. Last week we were dealing with how to change seconds to minute. Is that correct?

63 Chn. : Yes sir.

64 Tr. : Seconds to minutes and seconds. Today we are going to change the minutes also to seconds. We are going to change minutes to seconds. For example, I have one minute twenty five seconds I want to change of them to seconds. Now eh, how many seconds do I get from one minute? How many seconds?

65 Chd. : 60 seconds

66 Tr. : 60 seconds. Now if I have 1 min. 25secs. How many seconds in all? If I have 1 min. 25 secs. Mary just told us that 60 secs. will give us 1 min. So if I have 1 min. 25 secs. How many sec in all? 60 seconds is 1 min. then I have 25 also

67 Chd. : 80 sec.

68 Tr. : No. 60 secs + 25secs, 60secs +25secs. Yes.

69 Chd. : 85 secs.

70 Tr. : 85 secs. 85 secs. Let's start with this. 1min 25secs. when you change all to secs. We shall get 85 secs. Now let's try this: I have 2 min. 0 secs. How many seconds in all? I have 2 min. 0 secs. How many secs in all?

71 Chd. : 120 secs.

72 Tr. : 120 secs. Another example, 1 min. 50 secs. Change all to secs. 1 min. 50 secs. Let's change all to secs. Esther Boateng.

73 Esther. : 110 secs.

74 Tr. : 110 secs. Is it correct?

75 Chd. : Yes.

76 Tr. : 110 secs. Now somebody should write the 110 secs for us to see. Hundred and ten, come and write it for us to see. Mary.

77 Mary : [Writes 110 on the board].

78 Tr. : Very good. Clap for her.

79 Chn. : [Clapping]

80 Tr. : Then we shall try example in our exercise books to see. (Tr. writes on board)

81 Chn. : [Noise]

82 Tr. : Changing to seconds**[writes on board. Now I have 1 min. 15 secs. We are going to change all to seconds. Then you will write your answer at the space I have provided you.

83 Chn. : [Noise]

- 84 Tr. : Now let us try and do number one for us. Let us try number one and, and, we and take it as an example. Number one who can read the sentence? Mhum. Read the sentence on the board. **Hwε εw▷ board no so. Mese eyε dεn? Na hwε ma nim ha.** Number one, **w▷se dεn na y▷?**
- 85 Chd. : 70
- 86 Tr. : No
- 87 Chd. : 1 min. 15 secs.
- 88 Chd. : 70 secs.
- 89 Tr. : You are wrong. Comfort.
- 90 Comfort : 1 min., 1 min. 15 secs, 75 secs.
- 91 Tr. : Anyway, it is correct but it is this: 1 min. 15 secs = 75 secs. Look at it again. 1 min. 15 secs is equals 75 secs.. Right. We shall try and do it. I want to see the first person. Put down your book as you normally do and then you will write your name and you start work. Number one is done for you so you have four to tackle
- 92 Tr. + Chd. : [distribute pupils exercise books]:Juma Robert, Juma Robert, Atta Manu, Esther Boakye, Afrakoma, John Willy, Veronica Frimpong, Boakye, Oppong Comfort, Patricia, Osei, Regina, Konadu
- 93 Tr. : Now if you get it, put down your date, your name and then start work. Write changing to seconds before you start the rest.
- 94 Chd. : [proceeds with distribution of exercise books] :Agyei Daniel, Florence, Prempeh...
- 95 Tr. : Sit down, sit down
- 96 Chd. : [distribution continues]:Charles Donkor, Kwame Danso, Owusuaa
- 97 Chd. : **εnyε me deε.**
- 98 Chd. : [Continues distribution]: Afra, Tawia, Agyei Bawuah, Esther Nkrumah.
- 98 Tr. : Don't be silly. Sit down.
- 99 Chd. : **Wagye me pen, w▷n k▷ fa mbra w▷n bua me.**
- 100 Tr. : Sit down
- 101 Chd. : (Proceeds with distribution)Agyei Daniel, Opoku Ankrah, Emanuel, James, Nti...
- 102 Tr. : **Aha na wa bε tinase?**
- 103 Chd. : [distribution]:Ophelia, Elizabeth Konadu,
- 104 Tr. : Always your date should come on your right Felicia Dapaah. On your right hand side of the sheet and then your name under it. Who has finished one? **Piniha, piniha. Hwε sε adeε yi bε piniha. Fa k▷ nifa ha. Ntεm, wa twerε awiei? Yε ka asem kyere mo a mo nte a da. Adeε no εw▷ sε yede ba nifa. Seesei yε sε wos▷ sikan yi a, wos▷ sikan yi mu a, hwε, εsεsε εba wonsam nifa so ha.**
- 105 Tr. :Who has finished two?
- 106 Chn. : [Working]

- 107 Tr. : Who has finished two or one? Space them up. **Te ntamu naa**
ɛnye fɛfɛfɛ. Nka mbom na ye no tantan tan
- 108 Chn. :[Working]
- 109 Tr. :Hurry up.
- 110 Chn. : [Working]
- 111 Tr. : Who has finished three?
 If you finish three call my attention.
- 112 Chn. : [Working]
- 113 Tr. :**Hɛ**, one minute **ye** 60 secs **a**, **ɛnti** 2 min. **wei** **eye** 62 secs. One
 minute **kora wose eye** 60 secs. **Na wow** 2 min **a wose eye** 62 secs
- 114 Chn. : [Working]
- 115 Tr. : Somebody has finished. Get ready to stop work. **Wow** One
 minute **kora wose eye** 60 secs.. **Na wow** 2 minutes **wose eye** 35.
Wo date Kora wo ntumi mm wo date. If you have finished bring
 them. Those of you who has finish bring them.
- 116: Chn. [Working]
- 117 Tr. : Date **yi w** **ma no hwe ha**. **Aha yi a ɛsɛsɛ wob** **date no**.
Aha dah **kwa**. **Aha yi a ɛsɛsɛ wob** **date yi**. **Hɛ! Ye ka asem**
kyere mo a, mo aso enti kasa da
- 118 Chd. : Teacher **ma wieie**
- 119 Tr. : **Wo dee mebe buo**. Let me see by hand those of you who
 have finished.
- 120 Chn. : [Working].
- 121 Tr. : Stop work. Sit down, sit down. now let us go over and see if..
 Now when you go to number two. Look at the board, we have 2 Mins.
 10 secs. 2 min. How many secs do we have? One minute is 60 secs. so
 if I have 2 min. how many secs?
- 122 Chd. : 120 secs.
- 123 Tr. : 120 secs. Very good, and then I have 10 secs., put the two
 together. how many secs do we have?
- 124 Chd. : 130 secs.
- 125 Tr. : 130 secs. Now, number three 1 min. 35 secs.. How many secs
 in all? Tell me the answer. **Me, me gyina ha a me kasa no wo ntie,**
mmoade na woreye. Ma kase berɛbia mo behu me anim ha no, na
ɛkyere sɛ me bɛ ye dɛn? Mere bɛ kyere biribi. ɛnti ɛsɛsɛ dee
woreye biara woye dɛn? Wo gyae, na wo tie. Regina.
- 126 Regina : 95 secs.
- 127 Tr. : 95 secs. Is it correct?
- 128 Chd. : Yes
- 129 Tr. : Number four, 3 Mins. 20 secs. How many secs. in all? You.
- 130 Chd. : 200 secs.
- 131 Tr. : 200 secs., 200 secs. My friend write the two hundred secs.
 Hurry up, hurry up. Write 200. Take away the pen from your mouth.
- 132 Chd. : Goes to the board and writes

- 133 Tr. : Is correct anyway but... The last one 2 Mins 33 secs. How many? To get the secs and you then add the 33. Osei Bonsu, how many secs in all? 2 Mins 33 secs. Atta John tell us.
- 135 Atta : 150 secs.
- 136 Tr. : 150 secs. No, no. Who can correct it? Deborah
- 137 Deborah : 156 secs.
- 138 Tr. : No, Boakye.
- 139 Boakye : 153 secs.
- 140 Tr. : 153 secs. clap for him, for her!
- 141 Chn. : [Clapping]
- 142 Tr. : It is correct. Write the 153 secs for us.
- 143 Chd. : Writes on the board.(150 3).
- 144 Chn. : [Laughing].
- 145 Tr. : 150 and 3. Is it correct?
- 146 Chn. : No
- 147 Tr. : Who can correct it for us? Regina. Give her the chalk. Sit down.
- 148 Regina : Goes to the board and writes.
- 149 Tr. : Good. That is 153. Now who got all correct? raise up your hands. Please raise up your hands those of you who got all correct. All the five. Right. So we shall continue tomorrow.
- 150 Tr. : Now you can...Veronica Frimpong start your corrections at once. Atta Adu start your corrections. Atta Manu, Atta Abu.

Appendix 5 (29) TH: Science.

LESSON : TWENTY NINE
 SCHOOL : ZONGO PRIMARY
 TEACHER : " TH "
 CLASS : P4
 SUBJECT : ELEMENTARY SCIENCE
 TOPIC : AIR OCCUPIES SPACE
 DATE : 12TH MARCH 1996.

- 1 Tr. : Sit. Stand. Right. Let us breathe in, breathe in, out. In. Out.
sit down. **εε, εden na ye twe kɔ ye mu no?** Atta Oppong.
- 2 Atta : **Mframa**
- 3 Tr. : Again.
- 4 Atta : **Mframa.**
- 5 Tr. : **ɔse mframa.** Right, how shall we call it in English?
Robert.
- 6 Robert: Air
- 7 Tr. : Air, all of you.
- 8 Chn. : Air.
- 9 Tr. : Again.
- 10 Chn. : Air.
- 11 Tr. : Let us spell it. Who can help us? Mary.
- 12 Mary : A-i-r.
- 13 Tr. : Good. a-i-r.
- 14 Tr. : All of us let us spell it.
- 15 Tr+Chn.: A-i-r. air.
- 16 Tr. : Good. This is what we are going to talk about today.
em. Now let us stand up again.
- 17 Chn. : [stand]
- 18 Tr. : Let us wind our hand to see.
- 19 Chn. : [swing hands].
- 20 Tr. : Very fast, stop, stop, stop.
- 21 Chn. : [stop swinging hands].
- 22 Tr. : **εden na na yehunu? Yeto ye nsam saa no. Na biribi
εkɔso. εfa yeho. εh, Lucy.**
- 23 Lucy : Mframa.
- 24 Tr. : Mframa. Alright sit down. **εε εpre pii se ye wɔ ye dan mu na
yeto mpoma mu a biribia εwɔ se ye nya no, εye na aka akyire emba.
Na ye bue mpoma no a wo behunu se adeebi refa mpoma no mu. Na
εkɔ na εba. Saa adee no εye! Boakye?**
- 25 Boakye : Mframa.
- 26 Tr. : Mframa. **Good. ε, mframa ye adebia ehia ye. Titiriu,
ɔnipa dasani bia. We all need air. Ye nyinaa ye hia den? Yehia
mframa. Se ye wɔ ye dan mu a, ye tutu mu a, mframa εnba. Na emo
nea εseε yehunu ne se, bebia ye wɔ bia, a tokoro daa hɔ deε,**

- mframa ewɔ hɔ. Na ye wei a ye be **prove** na ya hu. Bebia tokoro eda dee mframa ewɔ hɔ. Na seesei ye pe se ye hunu ekwan hodoɔ a yebe namso a ye be nya mframa. ee, ebi ne se mede mirika mekorɔ. Wo be hunu se mframa. ee biribi foforɔ wo hɔ a ebe tumi ama ye anya mframa? ebi ne sen? Boateng.
- 27 Boateng : Wode ntoma kata wo ho a na wo tu mirika a na mframa no refa.
- 28 Tr. : **Good.** ee, ye wɔ nkwadaa agorɔ bi, yede ntoma no bɔ wasene, na yede akita, na yede mirika, wo behunu se aye hurukutu wɔ wakyire. edeben na ewo mu?
- 29 Chn. : Mframa.
- 30 Tr. : **Very good.** Afei ekwan ben so na ye betumi anya mframa? e, Osei Bonsu.
- 31 Osei : Wobuei wo mpoma na mframa aba mu.
- 32 Tr. : eno dee ya dikan aka. Seesei mo ahunu se mpoma no mu ato. eden adee enna etu mu saa no?
- 33 Chn. : Mframa
- 34 Tr. : Mframa. Wonim a me se yeden?
- 35 Chn. : Pagya wo nsam.
- 36 Tr. : Pagya wo nsam. Mframa. ekwan ben so bio? Ye huwgya ye nsam sei a. **We shall get air.** Afrakoma.
- 37 Afrakoma : Wote dua asi a ema wo mframa.
- 38 Tr. : e ye tina dua ase a ye nya mframa, Mhum.
- 39 Chd. : Wokɔ mirika nso a wonya mframa
- 40 Tr. : Yekɔ mirika nso a ye nya mframa. Afei ma me nkae mo baakoɛ. e eye a yekɔ **park** no so, yede adeebi to so na yede ye nan ebɔ. Saa adee no. Den a?
- 41 Chd. : Bɔɔl.
- 42 Tr. : Bɔɔl. eden na ewɔ mu?
- 43 Chd. : Mframa.
- 44 Tr. : Mframa. **Right. next time let us try to say air. Okay?**
- 45 Chn. : **Yes.**
- 46 Tr. : **Let us try and say air. Now when we see a bicycle, eh, that is we have a bicycle and then the bicycle has got tyres and inside the tyres, that inside the tube, there is something in it. Se kai ana sakri, ne tyres no a ekɔ no, ne tyres. Ne tyre, eye a na biribi bi ewom. Nsuo ana edeen ade enna yede agu mu saa no? Yes.**
- 47 Chd. : Mframa
- 48 Tr. : **In English, ehe. Say it in English.**
- 49 Chd. : **Air.**
- 50 Tr. : **Air. Very good, air.** ee, Buronya nso si a, eye a na ya tetɔ adee bi asinsen ye dam mu eni ayi. Yebɔ din sen? **Yes Prempeh.**
- Prempeh: **baloo**[balloon].
- 51 Tr. : **Balloon, balloon. Alright, all of you.**
- 52 Chn. : **Balloon.**

- 53 Tr. : **Balloon.**
- 54 Chn. : **Balloon.**
- 55 Tr. : enye **baloo, baloo**[balloon]. enye se nnye yeka no, no, eye a, yeka tin. **It's balloon.**
- 56 Chn. : **Balloon.**
- 57 Tr. : **Right,** eden na eye a yede gu mu ma aye kese kakrakaa no?
- 58 Chd. : Mframa.
- 59 Tr. : Mframa. **Very good or.**
- 60 Chd. : **Air.**
- 61 Tr. : **Very good, or air.** ee meka kyere wose, bebia tokoro da bia no eye a na mframa ewo h. Na yebe hwe adee, se dee meka no eye nokware a. Tua no? Wo nsuo yi dee yebe see no na akyire yebe nya bi **office** ama wo.
- 62 Chn : [Noise].
- 63 Tr. : Pagya bra. Ko pagya nsuo no bra. em Nimo come yebe filli ye tua yi. Mese bebia etokoro da h bia, eden na ewo h?
- 64 Tr+Chn. : **Air.**
- 65 Tr. : **Good,** Nimo be filli tua yi. ema ya y, yatei. Bu nsuo no. Ma ne nkom. ee, se yeben neha a, yebe tese eye dede bi. edeben na eye saa no? Aye ma? Atta Manu.
- 66 Atta : **Air.**
- 67 Tr. : **Air, good.** ee aden ntiara? eye saa no, wose **air,** naa ekwan ben so na enam a enti eye saa? Danso.
- 68 Danso : emframa no wo adee no mu.
- 69 Tr. : emframa no wo adee no mu. Na ewo mu na eye saa no, seesei na mframa no eye den? Mary.
- 70 Mary : ek tua no mu.
- 71 Tr. : Mframa no ek tua no mu?
- 72 Chn. : [Noise].
- 73 Tr. : Meka se wonim a pagya wo nsam. Bawuah.
- 74 Bawuah : Apuei.
- 75 Tr. : Mframa no eye den? Apuei ek abntin. efiri se bebia mframa no wo bia no na se nsuo ko ye tua no ma pe, mframa noa na ewo h no ewo se eyi ne ho. enya kwan entina h bio. ewo se eye den? epuei ko abntene. ek! Se ye, ye, ye **balloon** no, ye pnp no kakrakaa na yepe se ye dwo noa, na eba be ye sedee na etie no a, mframa a ewo mu no aye den?
- 76 Chd. : ek!
- 77 Tr. : ek! Na se **balloon** no ye tiri a nye yiye na epai "too!" emframa a ewo mu no aye den?
- 78 Tr+Chn : ek!
- 79 Tr. : Mframa yahunu bi da? Hwan na ahunu mframa da?
- 80 Tr+Chn : Wore nhunu

- 81 Tr. : Na emom yete nka se mframa. ekwan ben so na yetumi te nka se mframa erefa. ekwan ben so na yetumi tee? Nhum.
- 82 Chd. : edua bi ewo wo fie na erefa wote se mframa no yi ye de.
- 83 Tr. : eye a dua no yeden?
- 84 Chd. : eye a, naaba no wosowoso.
- 85 Tr. : Anaa se na aye den bio?
- 86 Chd. : Naa n'ahaban no ekyeakyea.
- 87 Tr. : Naa edankyedankye saa. Na ama watumi ahu se mframa eyeden?
- 88 Chn. : efa.
- 89 Tr. : Afei nso ekwan ahodo bio a yebe fa so na ya hunu mframa. Obi de dua aye **example** se, se efa, yetumi huu se na edankyedankye. ekwa ben so bio na ye beti nka? Anaa se yebe huu se yeti mframa? eh.
- 90 Chd. : ebia na wote ho mframa no fa na wose a mframa no naa erefa yi.
- 91 Tr. : Mframa no na erefa yi enti mframa no aye den? Ano ete sen?
- 92 Chd. : Ano enwunu
- 93 Tr. : Mo enno na yebe tumi ahunu se seesei yi ara mframa a erefa yi ano yeden?
- 94 Chd. : enwunu.
- 95 Tr. : enwunu ekyere se mframa no eto dabia na ano no enwunu, eto dabi nsoa naa ano ehye. Mframa eto dabia na erefa a, enti eda a mframa be ye hye no, na ye tiri ye ana eden na ebeba? ebesie? em
- 96 Chd. : Na yareye womu.
- 97 Tr. : Anaa se...
- 98 Chd. : Yebe wuwuo.
- 99 Tr. : Woboa.
- 100 Chn. : [Laughing].
- 101 Tr. : Manu.
- 102 Manu : Ahuhuro aba.
- 103 Tr. : Ahuhuro aba. Na ahuhuro eba nso a eden na eba? efiri soro beba. Rebecca.
- 104 Rebecca : Mframa.
- 105 Tr. : Dabi.
- 106 Chd. : Atemmuda.
- 107 A' Chd. : Nsuo.
- 108 Tr. : Nsuo na ebeto nsuo beto nsuo.
- 109 Chn. : [Noise].
- 110 Tr. : Miawano. **Quiet!** ee ye adikan aka se babiara a ekwan biara da ho no mframa aye den? Mframa seesei ye bu nsuo egu ye tua yi mu no mframa no aye den? ek ee yehwe yen **science book** no mu a ee Mary kyi baako no bra. enye wei yi mo, ewo baako no mu, ka

woho. Wɔ hwɛhwɛ aba no, afei yɛkɔso. Mese mframa, sɛ yɛpɛ sɛ yɛhunu anaa sɛ yɛtɛ nka a, da biara no, ne fa no na ɛma yɛtumi hunu sɛ mframa yi ɛnwunu, ɛde anaa sɛ, sɛ yɛpɛ sɛ yɛtɛ nka sɛ mframa no ɛfa a ɛsɛsɛ yɛn adan no yɛ buehue yɛn mpoma anaa yɛn apono. ɛnti ɛmmrɛ pii no mframa yɛ adeɛ a ɛhia nnipa dua biara. **Right, class stand. Let us hold our breathe for sometime. Close your mouths, hold your lips tight.**

- 111 Chn. : [Noise]
 112 Tr. : **Leave it.**
 113 Chd. : Hɛɛ!
 114 Chn. : [Noise].
 115 Tr. : ɛyɛ dɛn? ɛdɛn na ɛsiɛ?
 116 Chd. : Na mehɔmɛ tɛ.
 117 Tr. : Na mehɔmɛ tɛ a, dɛn ntiara? Obi sɛ na ne ɔmɛ tɛ. Adɛn ntiara? Atta.
 118 Atta : Na m'atua mɛ hwɛnɛ.
 119 Tr. : w'atua wo hwɛnɛ na woɔmɛ tɛ, adɛn nti na na woɔmɛ tɛɛ?
 120 Chd. : Mɛ nya mframa nkɔ mɛ mu.
 121 Tr. : Wɔnya kwan ɛntwɛ mframa ɛnkɔ. Nti sɛsɛsi ya hunu sɛ mframa ɛyɛ dɛn? ɛhɔ hia yiye. Sɛ mframa no pa yɛn hɔ bɛyɛ minute koro pɛ naa wawu. Saa nti na onipa biara. Sɛ owu a, ɔbɛwu a, na akɔma no na ɛkɔ. Fa wɔnsam to w'akɔma. Wahunu sɛ ɛkɔ kim, kim, kim, kim, kim. Na daa ɛbetwa koraa no mframa nya kwan nkɔ mu no na ayɛ dɛn? Na wokɔ. **Sit down.** ɛɛ yɛ tɛwɛ mframa na yɛdɛ kɔ yɔ mu, na dɛɛ yɛdɛ pɛ abɔntɛn nso, nsoso ɛyɛ mframa. Nɛ mmɛnu wo dwɛnɛ sɛ dɛɛ ɛwɔ hɛn na ɛyɛ? Yɛ tumi tɛwɛ mframa ɛkɔ yɛmu, yɛ sɛnɛ dɛ ɛbi nso pɛ abɔntɛn. Nɛ mmɛnu dɛɛ ɛwɔ hɛ na ɛyɛ ma nnipa dua?
 122 Chd. : Dɛɛ yɛ tɛwɛ kɔ yɛmu.
 123 Tr. : Dɛɛ yɛ tɛwɛ kɔ yɛ ɛhɛ? Yɛmu no ɛyɛ. Na dɛɛ yɛ tɛwɛ kɔ abɔntɛn no yɛsɛ ɛyɛ dɛn? ɛnyɛ. Adɛn ntiara? Ya tɛwɛ mframa dɛ akɔ yɛ mu a, afei yɛ sɛnɛ dɛ apɛ. Yɛ sɛ ɛnyɛ. Adɛn ntiara? Karikari.
 124 Karikari : Ayɛ hyɛ
 125 Tr. : Obi sɛ ayɛ hyɛ. Mhum, ɛɛ dɛbɛn bio na ayɛ? Obi sɛ ayɛ hyɛ.
 126 Chn. : Wɔnya mframa ɛkɔ wo mu, afei asɛnɛ a pɛui, mframa no ɛwɔ womu nu a sɛnɛ apɛ.
 127 Chd. : Ano ayɛ nwunu.
 128 Tr. : Ano ayɛ nwunu, ɛm Boateng. Wo bɛtumi abɔa yɛn?
 129 Boateng : Ayɛ, ayɛ hyɛ m'bɛtumi ahwɛ agu akɔtɔ fɔfɔrɔ?
 130 Tr. : ɛnyɛ wo na wobɛ hwɛ agu ɛnoa ɛhwɛ aba fam, na yɛ sɛ ɛnyɛ.
 131 Chd. : Akyɛ.

- 132 Tr. : Akye wɔ woho nam mu nti ɛwɔ sɛ ɛbɛ sene. Deɛ enti a ɛba saa no. ɛkyerɛ sɛ mframa no a yɛhumi gu mu a na ɛdwuma pa a ɛsɛsɛ ɛyɛ no wɔ yɛ mu no ayɛ awie. enti ɛwɔ sɛ ɛyɛ dɛn? ɛbɛ sene, titiru deɛ ɛfa yɛ ase no, ɛyɛ a na ɛnye koraa. Me boa?
- 133 Chn. : No sir.
- 134 Tr. : Sɛ wo ne wo nua te hɔ a wobɛ hunu sɛ wa yɛ sei. Adɛn ntiara? ɛmframa ɛde aba no
- 135 Tr+Chn. : ɛnye.
- 136 Tr. : Na wa yɛ sei. enti mframa yɛ adeɛ ɛhia yɛ nyinaa. ɛnye nnipa titiru bia. Mary sit down. ɛɛ afei yɛre, yɛ bɛkan, yɛ wie pɛ mɛkyerɛ wo adeɛ bi. Buroni frɛ no kite. Yei na yɛde ahoma sɔ so ɛde kɔ sorosoro na ɔyɔ a wo dwene sɛ hwan ɛna ɛkita mu wɔ soro hɔ? Mansa.
- 137 Mansa : Mframa.
- 138 Tr. : In English
- 139 Mansa : Air.
- 140 Tr. : Air. Very good. ɛɛ Yɛbɛ yɛ bi akyire na yɛ nea ya kɔɔ ahoma ɛde asɔso na ya yɔ. Yɛ science book baako no mu, ɛno na anka me pɛ, mede akyerɛ yɛ nyinaa.
- 141 Chd. : Yɛ book baako no nso ɛbi wom.
- 142 Tr. : ɛbi wo mu? Afei sɛ ɛno paho a, ɛno paho a, ma dikan aka akyerɛ wo sɛ, yɛ bɔɔl a yɛ bɔ yi, balloon a yɛ, yɛ huei yi, ɛɛ, afei so, bicycle ana lorry [lorry] tyres no ɛno nso no mframa wo mu. Saa, afei titiru yete kai mu a, ɛdɛn na yɛ hunu? Yete kai mu na kai no tu mirika kɛsɛ paa, ɛkɔ speed no.
- 143 Chd. : Mframa
- 144 Tr. : Mframa. Afei nso no sɛ kai no si hɔ na yɛ nya mfro yɛ a, ɛyɛ a, na ayɛ dɛn paa? Kaa no.
- 145 Tr+Chn. : Ahuhuro, ahuhuro.
- 146 Tr. : Na ɛmom sɛ kai no tu, kaa no tu, wo behunu sɛ obiara ho ayɛ no fɔm, adɛn ntiara? ɛdɛn na aba, ɛna ama yɛ ho ayɛ yɛ fɔm? ɛhɛ.
- 147 Chd. : Air.
- 148 Tr. : Air aba mu, aba ka no mu, me boa?
- 149 Chn. : Dɛbi.
- 150 Tr. : Air aba kai no mu. ɛno nti ɛsɛsɛ yɛ ho ɛtɔ yɛn. enti mframa yɛ adeɛ a ɛhia bɛɛbia. Yɛn fa no sɛ, yɛ wɔ bɔɔl ɛna ma twe mframa na ma bɛ yɛ no mma. Mframa abɛ yɛ ma. ɛɛ kwan bɛn so na me nya mframa no ɛdɛ ko mu? Kwan bɛnso na me nya mframa no ɛdɛ kɔ bɔɔl no mu ɛma ɛkɔ yɛ kakrakaa?
- 151 Chd. : Wo pɔm pii yɛ
- 152 Tr. : wɔsɛ me yɛ ɛdɛn? Me pɔm pii yɛ? Me pɔm pii. ɛɛ, kwan bɛn so na me nam a me nya yɛ? Yaw.
- 153 Yaw : Deɛ ɛfiri wo yam mu ɛba no na wode gu bɔɔl no mu.

- 154 Tr. : eyɛ, Comfort sɛ me pɔm pi yɛ. Gyimah nsoso sɛ deɛ ɛfiri me yam mu ɛba no ɛnna mede ɛhue. ɛnti sɛ yɛ bɔ ya afunu ɛpɔ sei yɔ a, yɛ saa ma me hwɛ. Mhum, ɛkyere sɛ, sɛ woyɛ saa pɛ mframa abɛ yɛ wa fono mu mma. ɛnti wo bɛbɔ mmɔden ara sɛ wo de huua, titiru **balloon**. ɛnna yɛ timi ɛde yɛ ano ɛde yɛ dɛn? ɛhuua. ɛnna afei nso bɔɔl deɛ yɛde **pump, pump. Pump** yahunu bi da?
- 155 Chn. : **Yes sir.**
- 156 Tr. : ɛbi si **office**, yɛ wei a mbɛ kɔ akɔfa na mede akyere wo. **Master bicycle** no kora wɔwɔbi ɛwɔ mu. Yɛde bɛ kyere wo. ɛhe, ɛɛ afei madwo no, madwo no! Afei mframa no aye dɛn?
- 157 Chn. : ɛkɔ
- 158 Tr. : ɛkɔ! ɛkɔ he ne? Fa prayɛ no to hɔ. ɛkɔ he ne?
- 159 Chd. : Apue.
- 160 Tr. : ɛmframa no apue. Saa nti no yɛ nim bɛbia mframa no akɔ. Na ɛmom, yɛ no, yɛhunu sɛ apue ɛkɔ ɛfiri sɛ bɔɔl no aye ɛdɛn? Adwo! ɛnti ɛmframa no, ɛdwo a, na bɛbia ɛwɔ sɛ ɛkɔ bɛbia ɛkɔ. Na ɛmom dɛbia no yɛhia mframa. Onyame nso no, wa boa yɛn. ɛda a mframa no bɛ cease da koro koraa, yɛ nyinaa yɛbɛ yɛ ɛdɛn?
- 161 Tr + Chn. : Yɛbɛ wuo.
- 162 Tr. : ɛnti Onyame wa mayɛ nkwa. Dɛbia mframa ɛfa. Ya da o! Ya nyani o! ɛdɛn ne o! ɛmframa no ɛfa. Sɛ yɛ kɔ mpo ano, ɛpo ano, ɛpo, yɛ hunu sɛ mframa no ɛfa bɛrebɛia. ɛɛ ɛda yɛ draw Ghana **map** no me kyere wo sɛ tumtum bia ɛgyina hɔ ma dɛn? **Blue stands for? Yes Mary.**
- 163 Mary : **Sea.**
- 164 Tr. : **Stands for the sea.** ɛnti sɛ yɛ kɔ ɛpo no ano a mframa firi akyirikyiri na ɛba, na abɛduru ɛpo no ano: "pawou", na ɛsane kɔ pawou! Mframa ɛwɔ ɛpo no so no ɛso yiye. ɛnti mframa ɛwɔ ɛpo no so no, ɛtɔ dɛbia ɛtumi ma yɛn nsuo: nsuo tɔyɛ. Saa bɛrɛ yi mframa ɛwɔ ɛpo no so no ɛma yɛ nsuo tɔyɛ. ɛba, aka kakra bi na yasi nsuo tɔyɛ bɛrɛ. ɛnye ɛpo so nkoa. Sɛ ɛtɔ da bi a, wote sɛ **aeroplane** su. Ya hunu **aeroplane** da?
- 165 Chn. : ɛdɛn na ɛma no tu kɔ soro?
- 166 Chd. : **Air.**
- 167 Tr. : **Air.** ɛno na ɛboa **aeroplane** ma ɛtu kɔ soro. Nti sɛ **air** no ɛfaili no kwan mu a, ɛsɛsɛ wɔ yɛdɛn? wɔbɛ si hɔ. ɛboa yɛn paa. **engine** no ne **air** no boa ɛma ɛtu kɔ soro. Yɛ wo mu a, mframa ɛfa yɛho no ɛso yiye.
- 168 Chn. : [Noise].
- 169 Tr. : [Writes on the board]. Yɛ wiei a, yɛbɛ twɛrɛ wie nso agu yɛ note book mu. Nea ɛdikan, me kase mframa ɛwɔ bɛbia a kwan wɔ bia. A mframa nso, yɛtwe kɔ yɛ mu. **We should have used this word breathe. We breathe in air and then breathe out air. We say we take in air. Mframa no ɛkɔ yɛ mu. Now we take out air. Right.** ɛm, ya nya de mframa no akɔ yɛmu, asane de apue.

- Mframa no eye den? edi akɔ nea aba. ekɔ na aba, ekɔ na aba Ma ka
 akyerɛ wosɛ da ɛbɛ cease da koro no, enno deɛ ologurogo. ɛfiri
 enne yɛda dan mu a, yɛn poma esesɛ yɛ bue. Na ɛmo akorɔmfoɔ
 nti, akorɔmfoɔ nti, wo ahwe yiye, ɔde wo nnoɔma nyinaa a yɛden?
- 170 Tr+Chn. :ekɔ
- 171 Tr. : **Okay**, wɔde kɔ koraa. Kakyere wo papa se **teacher**
 se eye a, wɔn buebue mpoma no ma mframa nya kwan nfa mu. Na
 ɛmom ma yɛ yira mfi engye mpoma no hɔ. ɛɛ, yɛn fie nsoso yɛ tumi
 buebue yɛn mpoma sɛdeɛ ɛbɛ ya mframa bɛ nya kwan aba na ya yi.
 Nti se yɛ tua, yɛ mma. Me ba tua yi so bio. eye mma, mframa ewo
 mu nu, mese a yɛden? Abɛ sene kɔ. Na ɛmom yeka nsuo no nyinaa
 tu gu.
- 172 Chn. : [Noise].
- 173 Tr. : ɛ sane yɛ dede no bio. ɛfiri se mframa no a ewomu no
 eye den? Abɛ sene. Seesei mframa a yɛden wɔ tua no mu bio?
 Kwame.
- 174 Kwame : Aba mu.
- 175 Tr. : Wɔse mframa no aye den?
- 176 Tr+Chn. :Aba mu. Na yehunu? Yehunu se mframa no
 ewɔ yei mu?
- 177 Chn. : **No sir.**
- 178 Tr. : Na ɛmom ekwan ne a yɛbɛ fa so ahunu se mframa aba
 mu na a sane akɔ abɔnten ne sɛn? ene se yɛde nsuo bɛ gu mu. Na
 yɛbu nsuo ɛgu mo a, dede no a ɛbɛ yɔ no ɛna ɛkyere se mframa na
 eye den? esene akɔ. enti animuanimu a mebe hwie nsuo no agu,
 ɛma me tua no mo ada hɔ no, mframa no ayɛden? Aye mma. Wate
 aseɛ? Sɛ mebu nsuo yi tua yi mma, me hwie tu gu na mframa abeye
 tua no mma. Me sane bu nsuo no gu mo mma ɛbɛ yɛ mma, mframa
 no ayɛden? ekɔ. Ne mmienu me pɛ se wote aseɛ. Aye se yɛ nipa yi.
 Yɛ home mframa no ekɔ yɛ mu. Na akyire yɛ sane hume pue
 abonten. Saa na ya fa no se tua yi etie. Wubu nsuo ɛgu mo ɛma ne
 yɛ mma, mframa no ekɔ. Wo sane hwie nsuo no ɛgu a mframa no
 aba mu. **Right**, ɛnye tua nkoa. ɛgrauwa kɛsɛo! gyesuo! ankoreo!
 edeno! Sɛ yɛde nsuo hyɛ mma pɛ mframa ewɔ mu bia no abɛ sene
 kɔ. Na ɛmom yɛ hwie tugu a, na enno nsoso aye den? Aba mu. Afei
 me bɛ bisa wo asem bi, mmienu bi. Wose wate aseɛ. ɛɛ mframa, air.
 Yɛse yɛn hunu bi da, me boa? **Okay**. Na me bisa wo **first**, obi se eye
 a, na woho aye wo hye. Naa kwan ben so ɛna yɛ fa etumi hu se
 mframa ano no eye din anaa ano eye hye? etɔ mmrebi mframa fa,
 esɛe nneɔma. Adɛn ntiara? Mframa no ano te sɛn? Nnanse yi yɛse
 obi ɛdan so paɛɛ. Wahuu se mframa no, na ano, na ete sɛn enti na
 etumi ɛma no baa saa no? Sarfowaa.
- 179 Sarfowaa :Na ano no eye din
- 180 Tr. :Ano eye den?
- 181 Chn. :Din

- 182 Tr. :etɔ dabi nso a mframa, yehuu se ebi eye sei. eno aden
ntiara? etwa ne ho saa.
- 183 Chd. :emmotia mframa
- 184 Tr. : Yese yefre no emmotia mframa. Se mmotia na ebɔ
saa mframa no deɛ, enno deɛ me nim. ɛɛ, Se awia bɔ pii a, mframa
no ne so no ete sen? Se awia abɔ pii no, eye a na mframa no aye
den? Amoah.
- 185 Amoah : eye hye
- 186 Tr : eye hye. Mframa no na aye hyehye hye. Na ekwere se
nyame boa yen a na nsuo. ebe ye den? ebe tɔ. eye. Na tie ha bio.
Mese mframa se ye de gu bɔɔl mu ana **balloon** mu a ekwan ben so
enna yede gu mu o! Ma bisa wo. Obi dikan a kase yede ya ano, obi
so se **baloo**[balloon]. ekwan ben nso bio? Wo betumi akwere ekwan
foforɔ a ye betumi ede mframa awura bɔɔl mu? **Baloo**[balloon] ya
ano ana **pump**. ekwan ben bio? Mhum. Yere se ye bɔɔl no be ye
mma. Yede ya ano ene pump ato nkyen. ekwan ben bio enna yebe
tumi a **pumpi** ema no aye mma?
- 186 Chd. : Wobe huu **pen** mu kɔ pim se ebe ye mma.
- 187 Tr. : Kyere mu yiye, kyere mu yiye
- 188 Chd. : Wode **pen** tua ano no na wa hu muua.
- 189 Tr. : **Pen?**
- 190 Chn. : **Yes sir**
- 191 Tr. : eye. Yebe tumi a nya kwan wie soso. **Pen** no tiri, ne
mbuasɔ no. Yebe tu ato atwene na ye agyae ne konko. ɛɛ na
yahunu agu bɔɔl no mu. ebe ba. Ye wie a yebe **try** a hwɛo!
- 192 Chn. : **Yes sir.**
- 193 Tr. : Obi ama ye kwan baako. Me kora anka me nim. wɔse
ye nya pen konko no a. Hu. Yen huu a ebe ye bɔɔl no mma. Kwan
ben so bio? mo mmɔ mo nsam ma no. Wa kyere ye nyansa baako.
- 194 Chn. : [Clapping]
- 195 Tr. :Hum, obi ama yen baako o! efiri enne korɔ se ye anya
pump a, yede ne **style** no, **pen** konko no betumi ayɔ. Afei ekwan
ben so bio? Mhum. Atta soso se wɔbe **try**.
- 196 Atta : eye a wɔm de ayibi nom nsa. Obi nom na wɔ to
twene a wobe tumi afa na wode ahu bɔɔl.
- 197 Tr. : ɛɛ edeben na eye a yede nom nsa?
- 198 Chd. : Deɛ eye a wɔm de twe nsa nom no.
- 199 Tr. : Deɛben?
- 200 Chn. : eye **rubber** tia.
- 201 Tr. : ɛɛ **rubber** bi wɔhu eye tia, tokoro da mu eye a yede
tɔn nsa. Tokoro da tire ne tire nyinaa. Wie se yede hye bɔɔl no ano
a yebe tumi ahuu a ma bɔɔl no aba dendenden. Me kase wɔka
durubin. Duruba nso, mo nim no?
- 202 Chn. : **Yes sir.**

- 203 Tr. :Dee ye papa emom ye a, yede twa abe no. eye a na yede ahye abe ase no. Saa duroba wɔm nso yebe tumi ede ahye ye bɔɔl no ano na ya yeden? Na ya hu, ema ya nya yen mframa. edeben bio? Ye anya enan. **pump**, ye ano, dee Djubeng ka ye yi
- 204 Chd. : **Pen**.
- 205 Tr. : **Pen** tontora. enna duroba. eye, ya nya bi paa. Yen kan ne baako pe koro pe na ye awiee. Yes Gyimah. Wo nso be kyere ye nyansa baako o! yes fa baako bra.
- 206 Gyimah : Se wo kɔ twa mpampuro na wo tumu a, wode tua bɔɔl no ano a, wohu mu a, bɔɔl no tumi ba.
- 207 Tr. :Pampuro nso ewɔhɔ. Nketewaa no bi. se ye fa, na ye twa etire ne tire, ye fa no to twene a ye betumi ede atua ano na ye a aye no den? Hu na yenso ya nya ye bɔɔl. Wo anya bɔɔl. Aha eden? Yen wiee ye. Beberee wɔ hɔ. Baako nso be ka baako akyere yen.
- 208 Chd. : Borɔfre ahahan se wo twa tire ne tire a wode tua a wobe tumi de a **pumpi**.
- 209 Tr. : Se wo nim borɔfre?
- 210 Chn. : **Yes sir**.
- 211 Tr. : Ne dua no wo twa etire ne tire a enno nso ye yɔ. Ye wɔ adee bi. Afafa. Wo nim no?
- 212 Chn. : **No sir**.
- 213 Tr. : eye a na ehyehye dan a apuepue nkyen no. eye white, yetwa borɔfre no ano a na yede atare hɔ. eye a ede den dwuma ma yen?
- 215 Chd. : Se wo huu mframa gu mo a na eye tetetete.
- 214 Tr. : Aha wo anya aben. Na yede bɔ ndwom ana yede bɔ aben. enno nso boa yen. Mframa mfasoɔ baako nono. Mframa ema yen nneema beberee. Seesei no borɔfre ene afafa eka bomu a yebe nya aben ewɔ hɔ. Ye tiri aye yiye. Aben nso a ye bɔ yi eye mframa enna eboa yen ema yebɔ. eseremfoɔ wɔm wɔ agorɔ bi. Yese biribi de godzi. Wɔm wɔ aben bi, se kampuro na wɔm de yeyeo! Se den neo! Ye nim. Na se ye goro a, na eno nso dam. Aye te se ye Asantifoɔ ye goro dawuro. edwom no, wɔm nso dwom eye de papaapa. **Wireless** so ye taa te ana se, se yekɔ Kumasi ana se agorɔ bi si. ɔman biara egoro a, na wɔm so dee no yede goro. yede nantwie abeben no enna aye. Se wahunu saa adee no. Nti ne nyinaa no, ne bɔ no, eden na eboa yen ma ebɔ?
- 215 Chd. : Mframa.
- 216 Tr. : Mframa na eboa yen ma yetumi bɔ ma no ye fefɛfɛ. Nti mframa de dwuma ahodoɔ beberee. ede dwuma ahodoɔ beberee. ee, yebe fa ye **home work exercise book** no.

Appendix 5 (30) TH: Ghanaian Language

LESSON : THIRTY.
TEACHER : "TH"
SCHOOL : ZONGO PRIMARY
CLASS : P4
SUBJECT : GHANAIAN LANGUAGE -TWI (L1)
TOPIC : "FAME TU, FAME TU"
DATE : 4TH. MARCH, 1996.

- 1 Tr. : Bue aduosia nwɔtwe. **That is sixty-eight.** Sɛ wa bue
hɔ dada ɛyɛ.
- 2 Chn. : [Noise] [opening of pages].
- 3 Tr. : Na neaɛ yɛ bɛ yɛ yato din sɛ "Fame tu". "Fame tu".
ɛɛ, fame tu yi, wabɔ ɛnomaa bi din ɛwom. Mo ma yɛn pɛ ɛnomaa
krɔ. Hwan ne na yɛ dikan bɔ ne din? Wo kasa kasa din. Anomaa
bɛn?
- 4 Chd. : Akyem.
- 5 Tr. : Akyem. Anomaa bɛn bio?
- 6 Chd. : Anene
- 7 Tr. : Mo, aka bio.
- 8 Chd. : Asee.
- 9 Tr. : Asee. Afei aka baako.
- 10 Chd. : Aserewa.
- 11 Tr. : Aserewa, mo. ɛnomaa ɛnan ɛna yabɔ wɔn din
ɛwɔ,ɛɛ, dɛ yɛ bɛ sua yimu. Na wato din: Fa me tu. Me boa?
- 12 Chn. : **Yes sir.**
- 13 Tr. : Fa me tu. ɛɛ, wɔse wɔn fano ɛnkɔ ɛhe? Dɛɛ ɛdinkan
no, wɔka aɛm bi. Wɔse wɔn fa no ɛnkɔ. Yenim fako krɔ. ɛhe ne
fa? Bio.
- 14 Bio. : ɔmaame hɔ.
- 15 Tr. : ɔse ɔnfa no nkɔ ɔmaame hɔ? ɛɛ, hɛ! Dɛɛ ɛdinkan
no, Wɔse ɔnfa no ɛkɔ ɔmaame hɔ. Hwan na ɛfa no ɛkɔ ɔmaame
hɔ?
- 16 Chn. : **Sir, sir, teacher.**
- 17 Tr. : ɛnfɛ me.
- 18 Chn. : Wɔse akyem ɛfa no ɛkɔ maame hɔ.
- 19 Tr. : Akyem ɛfa no ɛkɔ ne maame hɔ. Nea ɛtɔso mmien
nso wɔ hwan? Aba anomaa bɛn na wɔka ne ho aɛm no? anomaa
bɛn ara?
- 20 Chd. : Anene.
- 21 Tr. : Anene. Wɔse anene ɛna wɔn yɛ dɛn?
- 22 Chn. : Wɔn fa no ɛkɔ ɔpapa hɔ.
- 23 Tr. : Afei nea ɛtɔ so mmeɛnsa nso, anomaa bɛn a? Saa
anomaa no, ɛyɛ,yɛ nkwadaa no yɛ taa ɛkɔ nbankye ɛmua yɛ hunu
wɔn paa.

- 24 Chd. : Aserewa
- 25 Tr. : Aserewa sesa nsuo. $\epsilon\epsilon$, ndwom bi w \supset h \supset . $\epsilon\epsilon$ a na yede aserewa ϵ na ϵ to \supset .Hwan na ϵ nim saa ndwom no ϵ tow? Ye nyinaa yenim tow?
- 26 Chn. : **Yes sir!**
- 27 Tr. : Yen ntow ma yentie. **Ready go!**
- 28 Chn. : Aserewa bemma, adide didi. S \supset re s \supset re dwene bemma. Aboa adende di bemma.
- 29 Tr. : To bio, aye de papa.
- 30 Chn. : Aserewa bemma, adide didii. S \supset re s \supset re dwene bemma. Aboa adende di bemma
- 31 Tr. : Mo, ϵ dwom yi $\epsilon\epsilon$ de o! Me awie ara me so mmekyre baako bi akaho. $\epsilon\epsilon$, afei anomaa bi nso w \supset h \supset . We no soso bor \supset fer ϵ paa! Ne din?
- 32 Chd. : Asee.
- 33 Tr. : Saa anomaa no, $\epsilon\epsilon$ a na ntiriho aye den?
- 34 Tr+Chn : A pa.
- 35 Chn : [Noise]
- 36 Tr. : $\epsilon\epsilon$. Afei yeba dee yebe kan yi so. W \supset se: fa me tu. $\epsilon\epsilon$, w \supset m ye dede w \supset h \supset paa.
- 37 Tr. : \supset y ϵ . $\epsilon\epsilon$, me dikan ma kan nee ϵ dikan no: **“Akyem a worekor \supset no ei! Fa me tu. Fa me tu k \supset me maame h \supset . Fa me tu k \supset me maame h \supset . Na me hunu me maame aky ϵ “.** **Obi nkan ma mintei! Wonim a pagya wo nsam. $\epsilon\epsilon$, Gyimah bekan dee ϵ dinkan no ama yatei!** Hwe mu na kan ma mintei
- 38 Gyimah : **Akyem a worekor \supset no ei! Fa me tu. Fa me tu k \supset me maame h \supset . Fa me tu k \supset me maame h \supset . Na me hunu me maame aky ϵ .**
- 39 Tr. : Mo, B \supset wonsam ma no.
- 40 Chn. : [Clapping].
- 41 Tr. : **Akyem a worekor \supset no ei! Fa me tu. Fa me tu k \supset me maame h \supset . Fa me tu k \supset me maame h \supset . Na me hunu me maame aky ϵ “.** Afei ye k \supset dee ϵ t \supset so mmien ϵ no. ϵ no nso w \supset se, $\epsilon\epsilon$, anene. Kan ma mintei ϵ . Me pe se wo behwe nhoma no mu, me npe se wode wotirim be kan. Hwe nhoma no mu sedee ya si atwere no. Saa na wo kan no. $\epsilon\epsilon$, Nkrumah Esther. Hwe mu na kan ma mintei. $\epsilon\epsilon$ a hwe mu yiye. $\epsilon\epsilon$ a kan no kese o!
- 42 Nkrumah : **Anene a worekor \supset no ei! Fa me tu. Fa me tu k \supset me papa h \supset . Fa me tu k \supset me papa h \supset . Na me hunu aky ϵ “.**
- 43 Tr. : $\epsilon\epsilon$, bebi akyea kakra bi. Dee ϵ twa ϵ to \supset no. Tene h \supset ma me hwe.
- 44 Nkrumah : **Fa me tu k \supset me papa h \supset . Na me hunu aky ϵ .**
- 45 Chn. : [Noise]
- 46 Tr. : Atta Adu tene no ma me hwe.
- 47 Atta Adu : Me nkan ne nyinaa?

- 48 Chn : [Noise]
- 49 Atta Adu : Na me hunu me papa akye.
- 50 Tr. : Na me hunu me papa akye. Afei ye kɔ mmeensa. Aboa ben a?
- 51 Chn : Aserewa.
- 52 Tr. : Atta Adu kan ma minteiɛ. Fa nhoma no na hwe so na kan.
- 53 Atta Adu : Aserewa worekorɔ kɔ no ei! Fa me tu kɔ me nua hɔ. Na me hunu akye.
- 54 Tr : Mo. Me hunu akye. Afei ye kɔ nea etwa toɔ no. ena anomaa ben a?
- 55 Chn. : Asee
- 56 Tr. : Regina Antwi kan ma me hwe.
- 57 Regina : Asee a worekɔ.
- 58 Tr. : Kano kese.
- 59 Regina : Asee a worekɔ no ei!
Fa me tu. Fa me tu kɔ madamfo hɔ.
Fa me tu kɔ madamfo hɔ.
Na me hunuu m'adamfo akye.
- 60 Tr. : Mmo. Bɔ wonsam ma no.
- 61 Chn. : [Clapping].
- 62 Tr. : eyɛ. Ye hunu ye nnomaa enna ne yi asem akan. ebi se ye fa no entu ekɔ ne papa hɔ. ebi se ye nfa no ntu nkɔ ne maame hɔ. ebi se madamfo hɔ. ebi se ne nua . eyɛ. Tum ye na nsem bi wɔhɔ mbe bisa wo. Tum, na mbisa woa wonim a ye den?
- 63 Tr+Chn. : Pagya wo nsam.
- 64 Tr. : Nfrɛ me sir, sir. Dabi. ese deɛ edikan no. eden na obi pe se akyem ye ma no? Den na obi pe se akyem ye ma no? Obi. Fa no se me, me ye obi. ena me pe se akyem ye biribi ma me. Deen na me se akyem wɔn ye ma me?
- 65 Chd. : Na wɔ pe se wo de no tuo.
- 66 Tr. : ɔpe se wɔ de no tuo. Na wɔ tuo a wɔ de no tuo, wɔ se wɔn fa no entuo ekɔ hene?
- 67 Chd. : Wɔse wɔ fa no entu ekɔ ne maame hɔ.
- 68 Tr. : Wɔse wɔ fa no entu ekɔ ne maame hɔ. Mo. Afei deɛ etɔso mmeinuu. Hwan hɔ na obi pe se anene edino korɔ? Hwan hɔ na na wɔ pe se anene wɔde no korɔ? Aboa a, Twi no no. Ye, ye taa ka adene. Na wei ye Akwapim. Twi wɔ se anene. Nti ne nyinaa ade ku deɛ. Wɔ se hwan hɔ hwan?
- 69 Chd. : Wɔse ne papa.
- 70 Tr. : Ne papa. eyɛ nekore saa?
- 71 Chn. : Yes sir
- 72 Tr. : Wɔse wɔn fa no nkɔ ne papa hɔ. Adeɛn ntiara? Adeɛn nti na wɔn fa no nkɔ ne papa hɔ? Se me gyina hɔ ara na ma ba. Me se fa me ke me papa hɔ. Wo gye se deɛ ben ntiara? Nhum.
- 73 Chd. : Wɔ hunuu akye.

- 74 Tr. : Wɔ hunuu akyɛ ɛno nti na wɔse wɔn ye no den? Wɔn fa no nkɔ ne papa hɔ. Afei deɛ ɛtɔso mmeɛnsa. ɛdeɛn nti na obi pɛ sɛ aserewa de no kɔ ne nua hɔ? Deɛn ntiara? Sɛ me te hɔ ara na me se fame kɔ me nua hɔ.deɛn ntiara? Opoku.
- 75 Opoku : Wɔ hunuu akyɛ.
- 76 Tr. : Wɔ hunuu onua no ayɛ den?
- 77 Tr+Chn. : Akyɛ.
- 78 Tr. : Akyɛ. Afei ɛnan. ɛhene na obi pɛ sɛ asee de no korɔ? Asee, ɛhene na obi pɛ sɛ asee de no korɔ?
- 79 Chd. : Nadamfo hɔ. Wɔ hunuu akyɛ
- 80 Tr. : Nadamfo hɔ. Asee, na wa ba wɔ se fa me kɔ madamfo hɔ. ɛbia ye kase nadamfo ne apɛtupirei. Nti na wɔse tu. Fa me kɛ madamfo apɛtupirei hɔ num. Na wɔm ani akɔgye kama. Afei. Deɛ ɔtwereɛ saa anwɔnsɛm yi de sɛn? Me bɛ bubɔ din bi akyere wo. Na saa din no ɛmu baako,ɛɛ ɛna ɛtwereɛ saa anwɔnswɛm yi seesei ye kan ye. Tei ɛdin no o! Deɛ ɛdinkan wa to din. Deɛ wɔ twereɛ ye no din o! Wɔse ye frɛ no akyem. Deɛ ɛtɔso mmeinu, “maame”. Nɛɛ ɛtɔso mmeɛnsa, “m’adamfo ɛna deɛ ɛtɔso ɛnan wɔse ye frɛ no Gyekye-Aboagye. Wo gyede sɛ hwan na ɛtwereɛ ye?
- 81 Chd. : Gyekye-Aboagye.
- 82 Tr. : Gyekye-Aboagye. Gyekye-Aboagye.ɛɛ deɛ ye keka mmeɛnsa no nyinaa no ɛɛ ɛnye ɛnoa, ɛfiri sɛ, nea ɛdinkan sei, wɔse akyem. Akyem ɛye nipa na wa tumi atwere nwoma? “maame” so ɛwɔ mu beberee. ɛnye wɔm nyinaa na ɛbetumi atwere ɛnnoma. ɛna m’adamfo nso, wokara, ɛnye din na atwere ɛnnoma.ɛnti ɛdin a, ana nipa ɛtwere saa nnoma yi yɛfrɛ no Gyekye-Aboagye. ɛye Kan deɛ ɛgusoɔ yi ma yɛnhwɛ. Mary.
- 83 Mary : Fa me tu kɔ me maame hɔ
- 84 Tr. : ɛbio.
- 85 Mary : Fa me tu kɔ me maame hɔ
- 86 Tr. : Mo, ɛɛ, wɔse fa me tu kɔ me maame hɔ. Bɛ san maame ase ma me hwɛ. Seesei yede ye tiri na asua agu ye tirim. Me pɛ sɛ ye sensan asee na ye hunuu deɛ ye yɔyɛ. Sensan maame ase ma me hwɛ, maame, maame.
- 87 Chd. : [Underlines “maame” on the board].
- 88 Tr. : Mo. Mmɔ wɔnsam ma no.
- 89 Chn. : [Clapping]
- 90 Tr. : Afei hwɛ so bioɛ. Tu kɔ, tu kɔ, tu kɔ. ɛbere bi na yɛye Twi me ma mode saa nsɛmfua mmienɛu yi ɛka aɛm . “tu kɔ”. John Willy kɔ san ase ma me hwɛ
- 91 John : [Underlines the wrong word].
- 92 Tr. : Tina ase, tina ase. Watwa ana watin?
- 93 Chn. : Watin.
- 94 Tr. : Obi mbɛ tene no ma me hwɛ. Man ka sɛ bekasa. Me se sɛ wonim a yedeɛn?

- 95 Chn. : Pagya wo nsam.
- 96 Tr. : Tu kɔ. Danso.
- 97 Danso : [Underlines the correct expression]
- 98 Chn. : enowaa nono
- 99 Tr. : Mo, mmɔ wo nsam ma no ye.
- 100 Chn. : [Clapping].
- 101 Tr. : Tu kɔ. Afei me be sesa. Me be ma woa nso atwere ahwe. Fa kɔ, fa kɔ, fa kɔ. Bio.
- 102 Bio. : [Writes Fa kɔ on the board].
- 103 Tr. : Mmo, enoa no no.εε “a” no, wo twereε a, hwe no yiye. Se n’abaa no wari kakra bia, akɔ ye sen?
- 104 Chn. : **Nine.**
- 105 Tr. : εε enna no me ka kyereɔ. Nhum, ewɔ se eye tia. Wei no mo nyinaa eye deε. Afei maame hɔ. Maame hɔ. Maame hɔ. **Take it.** Maame hɔ.
- 106 Chd. : [Takes the chalk from the teacher and goes to the board.]
- 107 Tr. : Maame hɔ. Wa awieie?
- 108 Chn. : **No sir.**
- 109 Tr. : Mese wɔn twere edeen?
- 110 Chn. : Maame hɔ
- 111 Tr. : No, enoa nono, maame hɔ. Afei sane buei wa ayi no. eduasa, krataa fa eduasa ε,aduosia nwɔtwe hɔ, bueie.
- 112 Chn. : [Noise]
- 113 Tr. : Yehwe deε etɔso mmeinuo noa wɔse :Anene a worekorɔ no ei! Fa me kɔ me papa hɔ.
- 114 Chn. : [Noise].
- Tr. : Dabiara se ye hunu se ya twere biribi te sei, naa yede ya sane abaa bi saa, na yede adeε bi asi aseε a. εε deε edinkan no, ma kyere wo se wei eye deen? Dawda.
- 115 Dawda : **Question mark.**
- 116 Tr. : Dabi ye ka ye kurom kasa. Mese eye deen? Danso se ɔbe boa yen. Ah eye deen
- 117 Danso : **Question mark.**
- 118 Tr. : Woboa, hwe eye deen?
- 119 Chd. : Asem bisa.
- 120 Tr. : Mmo mmɔ mo nsam ma no.
- 121 Chn. : [Clapping].
- 122 Tr. : eye asem bisa. Nti saa ara na yei nsoa Buroni aye no nso. eno nso εka biribi. Obi betumi akyere yendeε ekyere? Obi betumi akyere yendeε ekyere? Juma, anka wo pagya wo nsam. Danso ka biribi ma yentei.
- 123 Danso : **Question mark**
- 124 Tr. : Dabi. Yeka Twi. Mese Twi nkoa ara na ye kano enne. eye, ma me nkyere wo mu. εε! eye, εεh. Twi mu no yefre no “nteem den”.

Nteem den. enti wo hunuu se obi refre obia, abere biara no yetaa teem. Anomaa worekorɔ no ei! Wahunu se ma teemu ha. enti dabiara wo behunu saa mark wei no, na eye nteemu den. Ana se wei a me de si ha yi. eno nso ye gyina. Se wahunu? Dee yasua, krataa biara a ye twere no dee yede kekakeka ho no a naa dee edi akwerei biara no, ewɔ ebiara reka. Na enne dee yeka no ne nyinaa bi wɔ hɔ. Nteem mu den ewɔ hɔ. Nti biribia wo behunu no, hye no nso. ee, ee wo hunu saa mark yi a eye nteemu den. Afei kan ne nyinaa ma me nteie.

- 125 Chd. : [Inaudible]
- 126 Tr. : Dabi, me nfre wo. Wa pagya wo nsam a, na me fre woɔ. Ofori.
- 127 Ofori : Anene a worekorɔ yi. Anene a worekorɔ yi
- 128 Tr. : Woboa, entene, tene no. Wo kan ne ye antene, aka kakra. Mary.
- 129 Mary. : Anene a worekorɔ ei. Anene a worekorɔ no ei!
- 130 Tr. : Akyea kakra pe. Tene no yie.
- 131 Mary : Anene a worekorɔ ei!
- 132 Tr. : A sane akyea. Nhum.
- 134 Chd. : Anene a worekorɔ ei! Fa me tu.
- 135 Tr. : Dabi. Oppong be tene no.
- 136 Oppong : Anene a worekorɔ no ei! Anene a worekorɔ no ei!
- 137 Tr. : Ah. Anene a worekorɔ no ei! but ee ma ka akwere wose ye Twi kasa no, sedee yese twere no no, ene ne kan no eye a na a sesa kakra. Fa no se ye twere no, eye "worekore" worekore but ye kan no we ani mu a,eye "wɔkorɔ" wɔkorɔ. Anene a worekorɔ ei! Wei ye no, eine anene a worekorɔ no ei. Na nteem den mark no asi wɔ akwire hɔ. Anene a worekorɔ no ei"! Anene a worekorɔ no ei! Wei ekyere se, awei epe eyɔ. ee,ye be ye. Yetumi a kenkan no yei. Yebe twere kakra na ya hunuu se ampaa yate asee yei anaa. Afei yebe ye **dictation**. Me bubɔ na wa twere. Na me nso mahunu.
- 138 Chn. : [Noise].
- 139 Tr. : ee wei ye etwere. Mary be kye nkrataa noma wɔm. Me kase twere baako, mmeinu, mmeensa, enan, enum.
- 140 Mary : Sir, yebe ye five? Gyimah Robert. [distributing pupils exercise books]
- 141 Tr. : Afei to wo nwoma nu mu. Na me hunu se
- 142 Mary : Oppong Sylvester.
- 143 Tr. : Wo nsa kaa, enne edeen? Na twere wo din.
- 144 Mary : Ofori Daniel
- 145 Chn. : [Noise]
- 146 Tr. : Kasa
- 147 Mary : Evelyn Konadu, Braidu, Atta George, Kwame Danso, Ernest Dapaah, Opoku, Esther.
- 148 Tr. : Owusuaa [Tr. joins Mary in the distribution]

- 149 Mary : Esther Boateng
 150 Tr. : Dane wo ho. Frimpong, Afrakuma, Nimo, Sandra.
 151 Mary : Akua Tawia
 152 Tr. : Mawuko, Kwame Danso. Wei eye **writing**.
 153 Chn. : [Noise]
 154 Tr. : Hwan na enya ne deɛ?
 155 Chn. : [Noise].
 156 Tr. : Hwe na pipa. Ne nyinaa atu afra mu we ha. Agyei Regina a nya bi? Fa **paper**. To nwoma no mu.
 157 Chn. : [Noise]
 158 Tr. : Tenasi Agyei Bawuah. Tenase.
 159 Chn. : [Noise].
 160 Tr. : **Number one** ana se deɛ edinkan
 161 Chn. : [Noise].
 162 Tr. : Wa Kyere ho. Kɔ tena wo dabere. Kɔ tena wo dabere. Tena hɔ a. Eric tena hɔ a. Wa wei a pagya wo nsam.
 163 Chn. : [Noise]
 164 Tr. : Wa wei!
 165 Chn. : **Yes sir**.
 166 Tr. : Afei tenase ye.
 167 Chn. : Yen weie
 168 Tr. : Oo!
 169 Chn. : [Noise]
 170 Tr. : Twere **one**, deɛ edikan twere: Fa me tu.
 171 Chn. : [Noise].
 172 Tr. : Wa weie?
 173 Chn. : [Noise]. [Chn. Writing].
 174 Tr. : Mmeinutu kɔ, tu kɔ.
 175 Chn. : [Noise]. (Chn. Writing)
 176 Tr. : Mmeenasa :Papa hɔ, papa hɔ.
 177 Chn. : [Noise]. [Chn. Writing]
 178 Tr. : enan, enan: Mehui me papa akye. Mehui me papa akye. Mehui me papa akye. Mehui me papa akye.
 179 Chn. : [Writing]
 180 Tr. : Mehui me papa akye. Deɛ etsoɔ enun: wrekorɔ no ei. wrekorɔ no ei. wrekorɔ no ei.
 181 Chn. : [Writing].
 182 Tr. : Nea ebe ma no aye nwɔtwe. Yekɔ nsia, nsia: Fa me tu kɔ me nua hɔ. Fa me tu, fa me tu
 183 Chn. : [Writing]
 184 Tr. : kɔ me nua hɔ. Fa me tu kɔ me nua hɔ.
 185 Chn. : [Writing]
 186 Tr. : enson: asee, asee. enson, asee. asee.e nwɔtwe, nwɔtwe:
 187 Chn. : [Writing]

- 188 Tr. :Maame hɔ. Fa me tu kɔ maame hɔ but me pɛ sɛ wo
twɛrɛ maame hɔ nkowa. Maame hɔ, maame hɔ. Wo aweiɛ? Gyae
atwɛrɛ, fa wo pen to hɔ. tu wo krataa no mu. Fa bra.
- 189 Chn. : [Noise].
- 190 Tr. : Wode aba, kɔ na kɔ tenasi.
- 191 Chn. : [Noise].
- 192 Tr. : Hɛ
- 193 Chn. : [Noise]
- 194 Tr. : Tenasi. Afei yɛ sane kɔ akyire bioɛ. Na wo ahunu sɛ ya te
aseɛ ana. Buei krataa fa aduosia nwɔtwe hɔ bio.
- 195 Chn. : [Noise].
- 196 Tr. : dede no adɔso.
- 197 Chn. : [Noise].
- 198 Tr. : Buei ade no mu. Buei mu. Fato deɛ ɛwɔ hɔ no so. Pɛ bɛbi
tena.. Wo deɛ no na ɛwɔ hɔ no. Afei yɛ bɛ sane a kan. Na ya kɔ ya
kyire bio akɔ hwɛ sɛ deɛ yɛ kan ne yɛ no yate aseɛ a ana sɛ yɛ
bɛtumi a kan. Akyem, deɛ ɛtɔsoɔ, anene, deɛ ɛtɔsoɔ aserewa deɛ
ɛtɔsoɔ aseɛ .Ne nyinaa no “a” na ɛdikan mboa enan no nyinaa ana
ennomaa enan no nyinaa no “a” na edikan. Deɛ edikan yɛ aboa been?
- 199 Chn. : [Noise].
- 200 Tr. : Nimo.
- 201 Nimo : Akyem.
- 202 Tr. : Ka no kɛsɛ wo wɔ fie a wo kasa.
- 203 Nimo : Akyem.
- 204 Tr. : Akyem aboa bɛn bio. Anomaa bɛn bio na ɛtɔso? Mhum.
- 205 Chd. : Anene
- 206 Tr. : Anene. Frimpong.
- 207 Frimpong : Aserewa.
- 208 Tr. : Aserewa, ɛna afei.
- 209 Chd. : Asee
- 210 Tr. : Asee ɛmo. N’nyinaa yɛ kan ne, deɛ yɛn fa wɔm ɛtu nkɔ, ɛho
asɛm. Nti sɛ wo ahunu obi akyɛ a. Sɛ me wɔ ha yi, mehunu
madamfo akyɛ. ɛnoa ne sɛ me kɔ gyina **station** hɔ na ma pɛ kai na
ma yɛdeen? Na me kɔ. Na anomaa nso deɛ, ɛnoa ne sɛ wa bɔ na
tabanmu papaapa, na wa yɛ dɛn? Na wa tu kɔ. ɛnnɛ deɛ yɛ nyinaa
yadane ennomaa. Yɛ pɔne a, obiara ɛkɔ fie a, ɔnyɛ saa, wɔbɛ huu
sɛ wa tu na wɔ kɔ fie
- 211 Tr+Chn. : [Laughter].
- 212 Tr. : Yɛ pɔne a, wo yɛ saa na wo akɔ fie ɛyɛ, ɛɛ kan deɛ, kan
aseɛ no ma me tie. Woa wa yɛ **ready** no pagya wo nsam. Ofori
Francisca kan ma me tie.
- 213 Ofori : Anene
- 214 Tr. : Dabi. Hwɛ nnhoma no mu.
- 215 Ofori : Asee.

216 Tr. : Gyae. Se wo sore se wo be kan ne a esese wo fa enhoma no
 kita. Ana se wo tenase Se wo kan ne a, ewo se ennhoma no da wo
 anim.

Appendix	5 (31) TI: English.
LESSON	: THIRTY ONE
SCHOOL	: ZONGO PRIMARY
CLASS	: P5
TEACHER	: " TI "
SUBJECT	: ENGLISH LANGUAGE
TOPIC	: LOST IN THE FOREST
DATE	: 12TH MARCH, 1996

- 1 Tr. : Sit down. We are going to continue with our English comprehension: "Lost in the Forest". Okay before we continue, I will like to ask you a few questions. What is the name,....what are the names of the three friends? The name, yes Serwah mention one.
- 2 Serwah : Nsia
- 3 Tr. : Nsia, John Boakye.
- 4 John : Dapaah
- 5 Tr. : Dapaah, Ruth.
- 6 Ruth : Agyei.
- 7 Tr. : Agyei. Very good, very good. What is the name of the village? the village where Dapaah, Nsia and eh where they come from? Eunuch.
- 8 Eunuch : Domeabra.
- 9 Tr. : Domeabra. Very good, very good. We are going to continue. And before we continue we have to find the meanings of the new words or the key words. These are our key words. So we are going to find the meanings of the key words and see whether we can form sentences with the new words after we have explained the meanings of the key words. Okay. All of you : "Forest".
- 10 Chn. : Forest.
- 11 Tr. : Forest.
- 12 Chn. : Forest.
- 13 Tr. : Forest.
- 14 Chn. : Snails.
- 15 Tr. : Snails.
- 16 Chn. : snails.
- 17 Tr. : Snails.
- 18 Chn. : Hunter.
- 19 Tr. : Hunter.
- 20 Chn. : Night.
- 21 Tr. : Night.
- 22 Tr. : Domeabra.
- 23 Chn. : Domeabra.
- 24 Tr. : Domeabra.
- 25 Chn. : Domeabra.
- 26 Tr. : Forest.
- 27 Chn. : Forest.
- 28 Tr. : Snails.

- 29 Chn. : Snails.
 30 Tr. : Hunter.
 31 Chn. : Hunter.
 31 Tr. : Hunter.
 33 Chn. : Hunter.
 34 Tr. : Night.
 35 Chn. : Night.
 36 Tr. : Night.
 37 Chn. : Night.
 38 Tr. : Domeabra.
 39 Chn. : Domeabra.
 40 Tr. : Domeabra.
 41 Chn. : Domeabra.
 42 Tr. : We are going to find the meanings of these words. Forest, forest, what is a forest at all? Forest, forest. Gilbert Debrah.
 43 Gilbert : **Kwaeε mu εε**
 44 Tr. : **Kwaeε mu, Kwaeε mu, forest, forest. Okay how does a forest look like? W▷ no se Kwaeε mu. Na Kwaeε mu no kora eti sen? eti sen?** Constance.
 45 Constance: **εmu ye sum.**
 46 Tr. : **εδεβεν na εw▷ h▷ a ama h▷nom no aye tum no? Den na εw▷ h▷ a ama h▷nom no aye tum no? Mhum.**
 47 Chd. : **εwira**
 48 Tr. : **Nwura. Mhum.**
 49 Chd. : **Ndua.**
 50 Tr. : **Ndua. Nti baabi a ndua w▷ bebereε no ▷h▷ aye tum no yeεe εye δεβεν?**
 51 Tr+Chn. : **εye forest.**
 52 Tr. : Okay, I want someone to form a sentence with forest. Form a sentence with forest. Forest, form a sentence with forest. I am going to the forest. I am going to the forest. I am going to the forest. Yes.
 53 Chd. : Kofi is going to forest
 53 Tr. : Kofi is going to the forest. **Mhum.** Yes someone to try. You have tried.
 54 Chd. : Nsia going to forest.
 55 Tr. : Nsia is going to forest. Repeat that.
 56 Chd. : Nsia is going to forest.
 57 Tr. : Yes I want a last person to form a sentence with forest. Yes Amoah.
 58 Amoah : Dapaah is going to forest.
 59 Tr. : Dapaah is going to forest. Okay, very good. Snail, snail, snail. What is a snail? Snail. Rapheal. **Mhum.**
 60 Rapheal : [no response].
 61 Tr. : Snail, what is it? Yes Collins.
 62 Collins : **εwa**

- 63 Tr. : **ewa**. So what is it? **ewa no eye a? eye nipa ana se eye dua anna se eye den a?** What is it? Clement.
- 64 Clement : **Aboa**
- 65 Tr. : **Yoo**. Snail, okay, I want someone to form a sentence with snail. Snail. So snail is an animal. Yes a sentence with snail. Patricia Boateng
- 66 Patricia : [no response]
- 66 Tr. : Prince Agyei Kwarteng form a sentence with snail
- 67 Prince : Agyei is going to snail
- 68 Tr. : No please. Yes Charlotte. Form a sentence with snail.
- 69 Charlotte: Nsia is going to a snail.
- 70 Tr. : No please. Yes.
- 71 Chd. : Agyei is going to take. Agyei is going to take snail.
- 72 Tr. : Mm. You have tried. Sit
- 73 Chd. : I am going to pick snail.
- 74 Tr. : Very good. I am going to pick snail.. Okay, lets move to hunter, hunter. The meaning of hunter, hunter Yes Alfred.
- 75 Alfred : **ɔbɔfo**
- 76 Tr. : **Yoo. ɔbɔfo, ɔbɔfo, ɔbɔfo ne sen? ekyerɛ sen?**
- 77 Alfred : **Obi a wɔ kɔ wiram kɔ pɛ nam.**
- 78 Tr : Okay, so a hunter is a person who looks for animals to catch them in the forest. **ɔbɔfo ana se hunter no, obi a wɔ ye den? Obi a ɔkɔ wuram ekɔ pɛ den? ekɔ pɛ nam.** Night, night. Okay form a sentence with hunter. Form a sentence with hunter. Yes Anita.
- 79 Anita : Who is a hunter.
- 80 Tr. : No please. Hunter. Yes, **ka biribi** Patricia form a sentence with hunter. Hunter **Mhum**.
- 81 Patricia : My father is hunter
- 82 Tr. : Say my father is a hunter. Say that.
- 83 Patricia : My father is a hunter
- 84 Tr. : Very good, very good. **Aha**
- 85 Chd. : I am a hunter.
- 86 Tr. : I am a hunter. Very good. I am a hunter. Yes, the last sentence with hunter. I am a hunter. Gilbert. **Mhum**.
- 87 Gilbert : Kofi is a hunter.
- 88 Tr. : Kofi is a hunter. Okay, night, night. What is the meaning of night. Night, night. Prince Agyei.
- 89 Prince : Kofi is going
- 90 Tr. : The meaning of night. What is the meaning of night? Charlotte.
- 91 Charlotte: **Anadwo**.
- 92 Tr. : **Anadwo, anadwo. Ye wɔ anɔpa, awia, anadwo. Anadwo na obia kɔ da.** Yes a sentence with night, night. I want someone to form a sentence with night. Yesterday I came very late in the night. Yesterday I came very night, late in the night. I saw my father in the night. I saw my father in the night. Yes. You too form a sentence with night. Yes
- 93 Chd. : I talked to my father..
- 94 Tr. : Use night to form a sentence. Serwah

- 95 Serwah : I saw my mother in the night.
 96 Tr. : I saw my mother in the night. Yes Christi
 97 Christi : I saw my father in the night.
 98 Tr. : I saw my father in the night. Domeabra, Domeabra. What is it?
 Domeabra. Yeboah.
 99 Yeboah : **Kuro**.
 100 Tr. : **Kuro**. That is, it is the name of a town. Domeabra is a name of a
 town. Now I want someone to form a sentence with Domeabra. Mansa
 Comfort. Yes form a sentence with Domeabra.
 101 Comfort. : **Kuro din**.
 102 Tr. : **Fa ka asem**. Form sentence.
 103 Comfort : Kofi is Domeabra.
 104 Chn. : Laughter.
 105 Tr. : Domeabra! Don' laugh at her. **Wa try. Deɛ wɔ̃ bɛtumi aka na**
wa ka. Deɛ bɛn hein? Yes Rapheal form a sentence with Domeabra.
 106 Rapheal : [No response]
 107 Tr. : **Boateng yɛ ka biribi a na wote hɔ̃. Domeabra Gilbert.**
 108 Gilbert : Agyei is... Agyei is..
 109 Tr. : Emanuel Opoku Boakye form a sentence with Domeabra.
Mhum.
 110 Emanuel : Agyei is a hunter.
 111 Chn. : [Laughter].
 112 Tr. : Form a sentence with Domeabra. Yes.
 113 Chd : Agyei is going to Domeabra.
 114 Tr. : Agyei is going to Domeabra. The last sentence. The last sentence.
 The last sentence. Domeabra. The last sentence. Afro. **Me npe going bia**
bio. Mhum
 115 Afro : [No response]
 116 Tr. : Georgina Bema.
 117 Bema : [No response].
 118 Tr. : Rita Edusei.
 119 Rita : This Domeabra is road.
 120 Tr. : No please. You have tried but, it is not all that good. Yes
 Domeabra the last sentence.
 121 Chd. : Kofi is
 122 Tr. : **Me npe** Kofi is **bio o!** Eunuch Domeabra
 123 Eunuch : This is Domeabra road.
 124 Tr. : This is Domeabra road. Very good , clap for him.
 125 Chn : [Clapping].
 126 Tr. : Okay, now that we have understood the meanings of these new
 words. We are coming back to our passage, but before we read, I want to
 summarise the whole thing before we start reading: The hunter went near
 them and asked, 'what do you want in this forest at this time of the night?'
 They did not speak. 'Don't you know that you mustn't be here at this
 time?'
 Dapaah said, 'sir, we came to look for snails but we lost our way. Please
 help us.' The hunter asked them, 'where do you come from?' Dapaah

answered, 'Domeabra Sir.' The hunter asked them to follow him. Soon they came to a road. He pointed to the left and said, 'This is the road to Domeabra'. The boys thanked him and went home. Now, the other time we read and saw that the three boys could not find their way home. **Yε kan ne ye no, ye hunu se, afei ye kɔ duruu baabi no na mmemma mmeensa no aye deε ben? Na wɔ nom ayera. Wɔnom εnhu kwan. Nti ɔhɔ a εnna hwan.**

127 Chd. : ɔbɔfoɔ

128 Tr. : ɔbɔfoɔ, a hunter came. Nti wɔn kɔ ɔbɔfoɔ yi hɔ. εnna wɔm ka kyere no se den? ɔkyere wɔm kwan na wɔm be pe nwa, εnna wɔm ye den? Wɔm ayera. Nti ɔbɔfoɔ no, the hunter, so he asked the three boys to follow him. He showed them the way leading to Domeabra. **Ne nyinaa nono. Mo ate? Asi. Nti seesei no, ye be kan ha na ya bisabisa ye ho nsem a εwom. Nti** I am going to read once more again. The hunter went near them and asked, 'what do you want in this forest at this time of the night?' They did not speak. 'Don't you know that you mustn't be here at this time?' Dapaah said, 'sir, we came to look for snails but we lost our way. Please help us.' The hunter asked them, 'where do you come from?' Dapaah answered, 'Domeabra Sir.' The hunter asked them to follow him. Soon they came to a road. He pointed to the left and said, 'This is the road to Domeabra'. The boys thanked him and went home. Okay, we are going to read it, line by line and find the meaning of the sentence before I ask you questions. The hunter went near them and asked. What is the meaning of the first line? The hunter went near them and asked. The hunter went near them and asked. **εkyere sen? Mhum.** Yes, talk, talk, talk, talk. **Wodeε seδεε wote aseε fa biara no. eti saa, yebe fa. enti saa soso a na ya hwehwε bi.** Yes Mhum. The hunter went near them and asked. Elvis try.

129 Elvis : ɔbɔfoɔ no pinkye ne wɔm na wɔ bisa wɔm.

130 Tr. : Clap for him.

131 Chn. : [Clapping].

132 Tr. : The hunter went near them and asked. 'what do you want in this forest at this time of the night?' What do you want at this time?' Yes who will try? Serwah.

133 Serwah : ɔbɔfoɔ no bisa wɔm se εden na mo pe no anadwo bere yi.

134 Tr. : εwɔ he ne fa?

135 Serwah : εwɔ forest no mu.

136 Tr. : Very good, very good. The hunter asked them. 'what do you want at this time in this forest'. **Se wahunu. eberε a ɔbɔfoɔ no ben nkwadaa no wɔ bisa wɔm se den? 'Den na mo pe no anadwo yi mu εwɔ forest yi mu?' Tie no yiye o! Na me bisa wo question a wo a tumi a answer.** They did not speak. They did not speak. By the way according to the pronoun that we learnt "they" **gyina hɔ ma hwan no mo?** Comfort, Constance.

137 Constance: N'damfoɔ mmeensa no

- 138 Tr. : Very good. Okay. They did not speak. They did not speak. Bema Prince.
- 139 Prince : **Wɔm ayera wɔ forest no mu**
- 140 Tr. : **Dabi.** They did not speak. **Mhum.**
- 141 Chd. : **Wɔm an kasa.**
- 142 Tr. : **Wɔm an kasa.** Very good. **Wɔm an kasa.** ‘Don’t you know that you mustn’t be here at this time?’ ‘Don’t you know that you mustn’t be here at this time?’ ‘Don’t you know that you mustn’t be here at this time?’ Emanuel Boakye. Yes, **Mhum.** ‘Don’t you know that you mustn’t be here at this time?’ Serwah.
- 143 Serwah : **Wɔ bisa wɔm sɛ, “wɔm enim sɛ yɛn baha sa berɛ yi?”**
- 144 Tr. : **Yoo, ɔbɔfoɔ no bisa sɛ, Mo nim sɛ, enne sɛ mo baha nom sɛsɛbere yi anaa, ana sɛ saa time no mu.”** Sɛ wahunu? Nti saa na ɔbɔfoɔ no bisa wɔm. Dapaah said, ‘sir, we came to look for snails but we lost our way. Please help us.’ Dapaah said, ‘sir, we came to look for snails but we lost our way. Please help us.’ Yes **me sɛ deɛ wa dwene, sɛdeɛ wote aseɛ fa biara, yɛ deɛ? Bue wa ano na ka. enyɛ sɛ wote hɔ saa da bi a Serwah, enyɛ wo no nkowa enna ɛwɔ classroom ha.** Yes.
- 145 Chd. : Dapaah ka sɛ wɔm bɛ hwehwe nwa enna wɔm ayera.
- 146 Tr. : Very good Dapaah ka sɛ wɔm bɛ hwehwe nwa, enna wɔm a yɛ deɛ? enna wɔm ayera. Please help us, please help us. Yes Anita.
- 147 Anita : **ɔka sɛ ba..**
- 148 Tr. : **ɔka**
- 149 Anita : **ɔka sɛ ɔkyere no kwan.**
- 150 Tr. : **Mhum ana sɛ sɛn?**
- 151 Chd. : **ɔka sɛ wɔ nboa wɔm.**
- 152 Tr. : Very good, **wɔ kase ɔboa wɔm, wɔn boa wɔm.** The hunter asked them, ‘where do you come from?’ The hunter asked them, ‘where do you come from?’ Yes.
- 153 Chd. : **ɔbɔfoɔ no bisa wɔm sɛ wɔm firi he.** The hunter asked them, ‘where do you come from?’ **Wɔ bisa wɔm sɛ ɔmo firi he ne fa.** Dapaah answered, ‘Domeabra’, Dapaah answered, ‘Domeabra sir’. Mansa Comfort **wodeɛ tebɔɔ, wote hɔ. Mhum!**
- 154 comfort : **Dapaah ka sɛ wɔm firi Domeabra.**
- 155 Tr. : Very good. **Dapaah kase wɔm firi Domeabra.** The hunter asked them to follow him. The hunter asked them to follow him. The hunter asked them to follow him. Pay attention because I am going to ask you questions. The hunter asked them to follow him. Yes Rapheal.
- 156 Rapheal : [No response]
- 157 Tr. : **Adeɛ a yɛ yɔ wo wadwene kora enne ha, abonten na wo hwɛ. Patricia Boateng. Mhum**
- 158 Patricia : [No response]
- 159 Tr. : **Wo bɛ kase enne wan didi na wɔ baa sukuu.** Yes. The hunter asked them to follow him. Amoah Philip. The hunter asked them to follow him. Yes.
- 160 Amoah : **Wɔ de wɔm kɔ fie.**

- 161 Chn. : Eei!
- 162 Tr. : Dabi. Yes
- 163 Chd. : Abɔfra no bisa wɔ nom no, wo kɔ kyere wɔm kwan.
- 164 Tr. : Mhum Eric. The hunter asked them to follow him
- 165 Eric : ɔbɔfoɔ no ka kyere wɔm sɛ wɔm ndi nakyi.
- 166 Tr. : ɔbɔfoɔ no kase, wɔm ndi nakyi. Soon they came to a road. he pointed to the left and said. soon they came to a road. Adeɛ a wɔde wɔm akyi no, ɛɛ, wɔm di ɔbɔfoɔ no akyi no, ankye kora na wɔm bɛduru deɛ ɛkwan wɔ. Na wɔ dane ɛkyere wɔm ɛkwan bi, na ɛwɔ bɛnkum so. ɛnna wɔ ka kyere wɔm sɛ deɛ bɛn? Domeabra kwan no ɛnna ɛda hɔ nom no. The boys thanked him and went home. Wɔm da ɔbɔfoɔ no ase ɛnna wɔm yɛ deɛn? wɔm kɔ fie. So this is the whole story or the passage. Now I am going to ask you questions. Ya kyerekyere ne nyinaa ase awie. Nti obiara yɛ bisa wo question a, ɛsɛɛ wo tumi yi ano. Who said, “we came to look for snails and lost our way!” Who said this? Who said this, “ We came to look for snails but we have lost our way”. Who said this? Rita Edusei hwan na ɛka wei?
- 167 Rita. : Agyei.
- 168 Tr. : Yes.
- 169 Chd. : Twum.
- 170 Tr. : Yes
- 171 Chd. : Dapaah
- 172 Tr. : Very good, Dapaah said that. What did the boys went to the forest to do? What did the boys went to the forest to do? Alfred Yes.
- 173 Alfred : To look for snails.
- 174 Tr. : The boys went to the forest to look for snails. Who showed the boys their way home? Who showed the boys their way home? Gilbert Debra. Mhum.
- 175 Gilbert : Hunter.
- 176 Tr. : The hunter, the hunter, the hunter. Very good. Who said this “What do you want in this forest at this time?” What do you want in this forest at this time? Who said that? Christi.
- 177 Christi : The hunter.
- 178 Tr. : the hunter. Very good. Where do you come from? where do you come from? Who said, who answered this question? Where do you come from? Who answered this question? Rapheal
- 179 Rapheal : Domeabra.
- 180 Tr. : Wo!
- 181 Chd. : Dapaah.
- 182 Tr. : Dapaah, Dapaah, Dapaah, Dapaah, Dapaah. Where did the hunter pointed to? To the right or to the left when he was directing them. Where did the hunter pointed to? To the left or to the right. To the left or to the right. Georgina Bema. Mm
- 183 Georgina : Left.
- 184 Tr. : Left. Thank you. Very good. He pointed to the left. He pointed to the left. Very good. Okay. Now that we have, we have summarised the

passage, We have answered few questions based on what we have read. You are now going to read it. You are going to read the whole thing. And then you answer few questions in your exercise books for marking. The hunter went near them and asked.

- 185 Chn. : The hunter went near them and asked.
186 Tr. : The hunter went near them and asked.
187 Chn. : The hunter went near them and asked.
188 Tr. : What do you want in this forest?
189 Chn. : What do you want in this forest?
190 Tr. : At this time of the night.
191 Chn. : At this time of the night.
192 Tr. : The hunter went near them and asked.
193 Chn. : The hunter went near them and asked.
194 Tr. : What do you want in this forest?
195 Chn. : What do you want in this forest?
196 Tr. : At this time of the night.
197 Chn. : At this time of the night.
198 Tr. : They did not speak.
199 Chn. : They did not speak.
200 Tr. : Don't you know that you mustn't be here at this time?
201 Chn. : Don't you know that you mustn't be here at this time?
202 Tr. : Dapaah said.
203 Chn. : Dapaah said.
204 Tr. : Read aloud. Sir we came to look for snails.
205 Chn. : We came to look for snails.
206 Tr. : But we lost our way.
207 Chn. : But we lost our way.
208 Tr. : Please help us.
209 Chn. : Please help us.
210 Tr. : The hunter asked them, "Where do you come from?"
211 Chn. : The hunter asked them, "Where do you come from?"
212 Tr. : Dapaah answered.
213 Chn. : Dapaah answered.
214 Tr. : Domeabra Sir.
215 Chn. : Domeabra Sir.
216 Tr. : The hunter asked them to follow him.
217 Chn. : The hunter asked them to follow him.
218 Tr. : Soon they came to a road.
219 Chn. : Soon they came to a road.
220 Tr. : He pointed to the left and said.
221 Chn. : He pointed to the left and said.
222 Tr. : This is the road to Domeabra.
223 Chn. : This is the road to Domeabra.
224 Tr. : The boys thanked him and went home.
225 Chn. : The boys thanked him and went home.
226 Tr. : Once again. The hunter went near them.
227 Chn. : The hunter went near them.

228 Tr. : And asked.
 229 Chn. : And asked, the
 230 Tr. : What do you want in this forest at this time of the night?
 231 Chn. : What do you want... in... this... forest.. ...at... this time of the night.?
 232 Tr. : Some of you are not reading. They did not speak
 233 Chn. : They did not speak
 234 Tr. : Don't you know that you mustn't be here at this time?
 235 Chn. : Don't you know that you mustn't be here at this time?
 236 Tr. : Dapaah said.
 237 Chn. : Dapaah said.
 237 Tr. : Sir we came to look for snails but we lost our way.
 238 Chn. : Sir we came to look for snails but we lost our way.
 239 Tr. : Please help us.
 240 Chn. : Please help us.
 241 Tr. : The hunter asked them.
 242 Chn. : The hunter asked them,
 243 Tr. : Where do you come from?
 244 Chn. : Where do you come from?
 245 Tr. : Dapaah answered.
 246 Chn. : Dapaah answered.
 247 Tr. : Domeabra Sir.
 248 Chn. : Domeabra Sir.
 249 Tr. : The hunter asked them to follow him.
 250 Chn. : The hunter asked them to follow him.
 251 Tr. : Soon they came to a road.
 252 Chn. : Soon they came to a road.
 253 Tr. : He pointed to the left and said.
 256 Chn. : He pointed to the left and said.
 257 Tr. : This is the road to Domeabra.
 258 Chn. : This is the road to Domeabra.
 259 Tr. : The boys thanked him and went home.
 260 Chn. : The boys thanked him and went home.
 261 Tr. : And who can read alone? I want somebody to try. Try, yes Eunuch try.
 262 Eunuch : The hunter went near them and asked , "What do you want in this forest at this time of the night? They did not speak. No. Don't you know that you mu..
 263 Tr. : Mustn't
 264 Eunuch : Mustn't be he..
 265 Tr, : Here.
 266 Eunuch : Here at this time?
 Dapaah said, Sir we came to look for snails but we lost our way. Please help us.
 The hunter asked them: where do you came from?
 267 Tr. : Come from.
 268 Eunuch : Come from? Dapaah answered, Domeabra Sir. The hunter asked them to follow him. soon they come

- 269 Tr. : Came.
- 270 Eunuch : Soon they came to a road. He pointed to the left and said, "This is the road to Domeabra. The boy thanked him and went home.
- 271 Tr. : Very good. Yes who else can try? You want to try? Who else can try? Mhum Elvis.
- 272 Chd. : **Twe woho.**
- 273 Tr. : **Wodeε nhwε ha na kan**
- 274 Elvis : The hunter went
- 275 Tr. : Look on the board as he reads
- 276 Elvis : The hunter went
- 277 Tr. : Near.
- 278 Elvis : Near them and axe, axe what do you want in this forest at this, this at this time of the night? They did, They did not, speak. They did not speak
- 279 Tr. : Don't
- 280 Elvis : Don't know that
- 281 Tr. : Don't you
- 282 Elvis : Don't you know that you mustn't the
- 283 Tr. : Be
- 284 Elvis : You mustn't be here at this time?
- 285 Tr. : Very good. Yes someone to continue. I want someone to continue. Someone to continue. Amoah Philip continue. **εδεη na εdikan?** Sore. Yes Mhum. **Adee no na εgu board no so no.** Yes continue.
- 286 Amoah : The hunter
- 287 Tr. : **Tuaso bebia w▷ durueε. Na w▷n hwe so ana? Mhum.** You were not looking on the board. Grace continue.
- 288 Grace : Dapaah said, Dapaah said..
- 289 Tr. : **Bue wa ano na kasa..**
- 290 Grace : Dapaah said, Sir,
- 291 Tr. : **Hwe board no so na kan.**
- 292 Grace : Dapaah said
- 293 Tr. : We
- 294 Grace : We came to look for snakes. We came, we came to look for snails but we lost
- 295 Tr. : Our
- 296 Grace : Our we
- 297 Tr. : Our way
- 298 Grace : Our way
- 299 Tr. : Please
- 300 Grace : Please
- 301 Tr. : **Yε kan no, na wo nhwε. Na wo si h▷. Na wo si h▷.** Collins continue.
- 302 Collins : Dapaah said, sir. Dapaah said sir
- 303 Tr. : We
- 304 Collins : We came to look for snails, snails but we lost our way, way, place
- 305 Tr. : Please

- 306 Collins : Please
 307 Tr. : Mhum, Help us
 308 Collins : Help us. The hunter
 309 Tr. : Read aloud read aloud, read aloud.
 310 Collins : The hunter axe them who
 311 Tr. : Where.
 312 Collins : Where are you come from
 313 Tr. : Where do you come from?
 314 Collins : Where do you come from? Dapaah answered, Dapaah answered,
 Domeabra, Sir. The hunter axe them...to ..follow him.
 315 Tr. : Serwah continue.
 316 Serwah : **Dapaah. Me nfiti he ne?**
 317 Tr. : **Bɛbia wɔ** read **duru yɛ no.**
 318 Serwah : The they, the they
 319 Tr. : Okyerewaa continue.
 320 Okyerewaa: Soon they came to a road. she pointed to the
 321 Tr. : He pointed.
 322 Okyerewaa: He
 324 Tr. : Pointed
 325 Okyerewaa: Pointed to the left and sir
 326 Tr. : Said
 327 Okyerewaa: Said. This is the road to Domeabra. The boys thank, thank
 328 Tr. : Thanked
 329 Okyerewaa: Thanked him and went home
 330 Tr. : **Wo aye adeɛ.** Now we are going to take your exercise books and
 then answer some questions in your books.
 331 Chn. :[two children distribute the exercise books]
 332 Chd. : **Madam me huu me** buku[u= possessive marker]
 333 Tr. : **Yɛ gu ha.** Take your English books and answer the questions.

Appendix 5 (32) TI: Mathematics.

LESSON : THIRTY TWO
SCHOOL : ZONGO PRIMARY
CLASS : P5
TEACHER : "TI"
SUBJECT : MATHEMATICS
TOPIC : INTEGERS
DATE : 13TH MARCH, 1996

NOTE TO LISTENER OF TAPE RECORDING

There is noise at the background. It comes from the class next to the one recorded on this cassette. In spite of repeated appeals the teacher in the next class failed to control his voice and that of his pupils. The lesson recorded here is a mathematics lesson involving a female teacher. Please ignore the male voice and any English lesson responses inter-fused with the mathematics lesson.

- 1 Tr. : The other time we treated integers. We treated integers. That is positive and negative numbers. And we are continuing by showing integers with arrows. But before we start with showing integers with arrows. I want to go back to the positive and negative numbers. I want someone to come to the board and write negative five. Negative five, negative five. Eunuch.
- 2 Eunuch : [Goes to the board. Draws number line]
- 3 Tr. Hurry up, Negative five. No, just write negative five. I don't want you to use the number line. Write negative five.
- 4 Eunuch : [Writes]
- 5 Tr. : Very good, negative ten.
- 6 Chd. : [Goes to the board].
- 7 Tr. : Is that how to write negative ten? Collins. Yes come and try.
- 8 Collins : [Goes to the board].
- 9 Tr. : Twenty, hurry up.
- 10 Collins : [Writes on board]
- 11 Tr. : Is that twenty, positive twenty? Betty Hagan.
- 12 Betty : [Goes to the board].
- 13 Tr. : Very good, very good. Now someone should come and write negative four on the number line. Negative four on the number line. Yes Negative four on the number line.
- 14 Chd. : [Goes to the board, draws the positive side of the number line and writes (-4)]
- 15 Tr. : Is that where to write negative four on the number line?
- 16 Chn. : No Sir.
- 17 Tr. : Rita Edusei. Negative four (-4). Hurry up.
- 18 Rita : [Draws number line and writes (-4)]
- 19 Tr. : Very good, very good. Today we are going to continue with our integers, but this time we are going to show integers with arrows. Integers with arrows. [Teacher draws number line on bb].

- 20 Chn. : [Noise].
- 21 Tr. : And we are very much aware that on the number line, numbers on our left hand are what? Negative numbers and those on our right hand are what? Positive numbers. Okay. [Draws number lines on bb]. This is our arrow. I have taught you before in social studies that where this arrow is showing would tell you where? The direction of something, isn't it? so this is our arrow. We are going to use it to show numbers on the number line. [Draws a number of number lines on the bb.]
- Chn. : [Watch teacher and talk]
- 22 Tr. : We are going to use arrows this time to show numbers on the number line. We are going to use the arrow. Watch here. We have "A" is what? Negative three(-3). "B" is what? three (3) or positive 3. "C" is what? Negative 2.(-2) So we are going to use this arrow. [Tr completes drawing the number line by adding numbers to the lines drawn]. 'A' is, 'A' is negative three (-3). Serwah sit up. Negative three. We know that this is our zero. So the arrow is saying that we should start with negative three. The negative three should that go this way or on my left side?
- 23 Chn. : Left side.
- 24 Tr. : So you indicate the arrow. Start counting.
- 25 Chn. : 1,2,3.
- 26 Tr. : So when we use our arrow this is what? Negative three. We are showing integers with arrows. This is our negative three and then 'B' is saying what? Three or positive three. [Tr. draws arrows]. This is our arrow. This is our arrow. So start counting.
- 27 Chn. : 1,2,3,4,5.
- 28 Tr. : Count again
- 29 Chn. : 1,2,3.
- 30 Tr. : 'B' is what? Negative two. Have you seen that? From here to here. Lets count and see.
- 31 Chn. : 1,2.
- 32 Tr. : So 'C' is what? Negative two. [Tr. draws other number lines on the bb]. Let's do two more examples [draws more number lines on the bb]. Look at this arrow. We have what? 'A' and what? 'B'. we are going to use this arrow to indicate the correct answer on the number line. We have 'O' and then 'C'. This is the point. The two points dividing the arrow. So we are going to find where this arrow ends on the number line. So let's start counting. Mhum
- 33 Chn. : 1, 2, 1.
- 34 Tr. : Some of you are saying two. Some of you are saying one. Which one is the correct one?
- 35 Chn. : One.
- 36 Tr. : Okay start.
- 37 Chn. : 1, 2, 3.
- 38 Tr. : Have you seen it? It is vertical to what? Which number?
- 38 Chn. : Negative three.
- 40 Tr. : Negative three so 'A' is what?

- 41 Chn. : Negative three. Now let's find 'C'. Start counting.
 42 Chn. : 1, 2, 3, 4.
 43 Tr. : And 'C' is what?
 44 Chn. : Some saying positive four and other negative four.
 45 Tr. : **Ha!**
 46 Chn. : Positive four.
 47 Tr. : Mhum. Okay. [Interruption; A child crying +Lesson in next class]
 This time watch the arrows :where the point is directing. The two arrows.
 you are going to find the answer for 'K' and then what? 'D'. Now who
 can come to the board and count for us to see? Who can come and count
 so that we get the answer for 'K'. Who can come and try? Yes Eunuch.
 48 Eunuch : [Goes to the board] 1, 2, 3.
 49 Tr. : Mhum.
 50 Eunuch : So
 51 Tr. : 'K' is what?
 52 Eunuch : 4
 53 Tr. : 'K' is what?
 54 Eunuch : Negative 4
 55 Tr. : Negative 4; so 'K' is what?
 56 Chn. : Negative 4
 57 Tr. : I don't understand why he didn't start from zero. Why? why is it
 that Eunuch started from this place? **Aden nti na wɔ hye asee firi aha**
sei na wɔ an hye asee afiri zero no so. Mhum. Me nti asee eye den na
wɔ no ahye asee afiri zero no so? Na wɔ hye asee firi bebia saa point
no wɔ no? Mhum, Antwiwaa. Antwiwaa : efiri see wo afa point no
akɔ si zero no so, wode kɔsii one no so
 58 Tr. : Very good. **efiri see point no, aha sei, enna na ewɔ. enti**
bebia ewɔ no ehɔ ena abeye deben? ene number line no eye eyi,
vertical no. ehɔ nom na wɔbe ye den? Wɔbe hye asee afiri. Nti wɔ
hye asee no 1, 2, 3. ebe sii sen?
 59 Chn. : 4
 60 Tr. : Negative 4. Nti 'K' is equal to what?
 61 Chn. : Negative 4.
 62 Tr. : Negative 4. Okay 'B'. I want someone to come and find 'B'
 using arrows. Mhum. someone to come and find 'B' using arrows. Mhum.
 [knocks on table] Alfred come and try. Alfred hurry up. Mhum.
 63 Alfred : 1, 2, 3.
 64 Tr. : **Gyina hɔ, Eunuch, wɔ hye asee no wɔ start te efiri he?**
 65 Alfred. : [Points to place]
 66 Tr. : **Na eye den na wo dee wode wo dee no afiri ha?**
 67 Alfred : [Continues]
 68 Tr. : **Ye no ntem. Mhum.**
 69 Alfred : 1, 2,
 70 Tr. : 1, 2, 3, 4, 5. **Eei! 'B' ye sen? 'B' ye sen? Yes who can come**
and try? Eric. Eunuch eye no wɔ start-te wɔ he?
 71 Eric. : **Wode firi ha.**

- 72 Tr. : ϵ nea start-te firi bēbia w \supset hye aseε no.
- 73 Eric : 1, 2
- 74 Tr. : **Kan no din**
- 75 Eric : 1, 2, 3, 4, 5, 6.
- 76 Tr. : Nti 'B' yε sēn?
- 77 Eric : P \supset εyε p \supset ...p \supset
- 78 Tr. : **Mhum**, wodeε ka number no. 'B' yε sēn? εnka positive no. 'B' yε sēn?
- 79 Eric : 5
- 80 Tr. : Very good clap for her
- 81 Chn. : [Clapping]
- 82 Tr. : Nti 'B' nso yε sē sēn? 5. Yε use sii arrow no, yε ahunu sē, on the number line no, bēbi a εk \supset si yε no, 'B' εyε 5. [Tr. draws a number of number lines on the bb] I want someone to come to the board to come and use arrows to show negative 3 on the number line. Use arrow. Come and draw out to show negative 3 on the number line. **Mhum**, Clement. Yes hurry up. Negative 3. Use arrows to indicate.
- 83 Clement : Goes to the bb and starts work.
- 84 Tr. : Use arrow.
- 85 Chn. : Noise
- 86 Tr. : **Mo deε mon gyae no, ma ne yε. Mhum.**
- 87 Clement : **Ma wiee**
- 88 Tr. : **Wo awiee. Yoo, wo ayε adeε. Obi nso nbε try.** Use arrows Evelyn
- 89 Evelyn : [Goes to the board].
- 90 Tr. : Very good. Three. I want somebody to come and use arrow to indicate three. Constance.
- 91 Constance : [Goes to the board].
- 92 Tr. : Okay, very good. Yes who doesn't understand? **Hwan na εnte deε ya yε? Bēbi a yε ayε asi, hwan na w \supset n te aseε? Me tuaso.** [Tr. writes on the bb]. Let's try to solve those questions. Which integers does the arrow show if it goes from 'A' negative 3 to 7; 'B' 3 to 7? [Tr. writes on the bb]. Which integers does the arrow show if it goes from -3 to 7; -3 to 7? **Wa ma yēn question bi se yēn y \supset : (a) w \supset se negative three to seven; (b) Negative Eei! three to seven. Nti yε bē hye aseε a kan ne afiri negative three to sēn?**
- 93 Chn. : Seven.
- 94 Tr. : To 7. **Nti no yε bē hye aseε a kan.** This is our negative 3. Start counting
- 95 Chn. : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
- 96 Tr. : **εnti sē yε use arrow noa. This is our arrow; negative 3 to sēn? Negative 3 to 7 εnnie! Nti sē yε kan a, yε kan ne yε no. Sē yε jumpua, yε bē hwe εε, jumping dodo \supset a yε bēk \supset ak \supset si. sēn? Positive 7 no so. Nti count again**
- 97 Chn. : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
- 98 Tr. : Nti answer no εyε sēn? 'A' yε sēn?

- 99 Chn. : Seven.
- 100 Tr. : **Dabi, sɛ yɛ jump pi no. Yɛ huri ɛfiri 'B' ɛkoro no yɛ kan ne** how many times?
- 101 Chn. : Ten times
- 102 Tr. : **Nti' A' yɛ sɛn?**
- 103 Chn. : Ten
- 104 Tr. : Ten, 'B', 3 to 7. **Nti yɛde arrow no ɛk si 3 ak si sɛn?**
- 105 Chn. : Seven
- 106 Tr. : Seven so. **ɛni. nti yɛn hyɛ aseɛ.** Count
- 107 Chn. : 1, 2, 3, 4.
- 108 Tr. : 'B' **nso yɛ sɛn?**
- 109 Chn. : 4
- 110 Tr. : 'B' **nso yɛ 4, Okay.** [Writes on the bb] I want someone to come and try (a) -5 to 3. Which integer does the arrow show if it goes from negative 5 to 3. Yes I want someone to come and try it on the board. To use the arrow -5 to 3. negative 5 to three. First, first when you are coming to work, you first draw the arrow. you draw the arrow negative five to three. Then before, after you have drawn the arrow then you count. Mhum Eunuch. First indicate the arrow negative five to three. Mhum negative five to three.
- 111 Eunuch : [Goes to the bb].
- 112 Tr. : Negative five to three. Mm, now start counting.
- 113 Eunuch : 1, 2, 3, 4, 5, 6, 7, 8.
- 114 Tr. : So 'A' is what?
- 115 Chd. : [Inaudible]
- 116 Tr. : Very good. Go and sit down. Yes someone should come and try 'B'. Six to negative one, six to negative one. Mansa Comfort. You first indicate the arrow six to negative one
- 117 Mansa : [Goes to the board]
- 118 Tr. : Mhum, where? Six is where on the number line? Six **ɛw hene fa?** Number line **no so.** Six, Mhum. To draw your arrows from six to negative one
- 119 Chn. : Madam, madam!
- 120 Tr. : Gilbert.
- 121 Gilbert : [Goes to the board] Six.
- 122 Tr. : Mhum, so this is the arrow 6 to what? Negative one. Now count and let's see
- 123 Chn. : 1, 2, 3, 4, 5, 6, 7.
- 124 Tr. : So 'B' is what?
- 125 Tr + Chn. : 7
- 126 Tr. : Na 'B' is what?
- 127 Chd. : 7
- 128 Tr. : Very good. [writes on the board] Let's try this question too and see
- 129 Chn. [Noise + whispering and male teacher's voice from the adjacent classroom].

- 130 Tr. : Keep quiet, Now let's try this question. Draw a number line, draw a number line. Draw 4 arrows each showing the integers 5, 5. Let the arrows begin the following points: Negative one, negative two, two and three. Draw a number line. Draw a number line. This is our number line then draw 4 arrows, each showing the integers five. Let the arrows begin at the following points: Negative one, negative two, two and three. **Ye** number line **no enee. enna yese yen** draw arrows, **na** arrows **no ehye asee efiri saa** numbers **yi so. Ne nyinaa ek nk si** five. Positive five **so. enti yebē** draw arrows **na** arrows **no afa ak si** positive five. **enti** numbers **no**, negative one, two, two and three. Negative one. This is our negative one. The first one is what? Negative one. Negative one to **sen**?
- 131 Chn. : Five.
- 132 Tr. : **Dee wobē hye asee bia no esese ebē wie w he ne fa?**
- 134 Chn. : Five.
- 135 Tr. : Five. **Nti** negative two to five **no mepese obi ba board no so na w bē ye ma me hwe.** Negative two to five. **Ma ye** first one **no.** I have done the first one. Negative one to five, I want someone to come and work. Use the arrow to indicate negative two. Mhum ee! Tibua. Use a different arrow; negative two. Mhum
- 136 Tibua : [Goes to the board] and indicates the position of negative two.
- 137 Tr. : Very good. Two, two. Antwiwaa.
- 138 Antwiwaa : [Goes to the board].
- 139 Tr. : **Fa k soro.**
- 140 Antwiwaa : **Eei!**
- 141 Tr. : **K soro kakra.** Very good. Three. Constance.
- 142 Constance: [Goes to the board].
- 143 Tr. : **K soro kakra.** Is she correct?
- 144 Chn. : No
- 145 Tr. : Why? Amoah to tell us come and try
- 146 Amoah : [Works].
- 147 Tr. : Thank you. Go and sit down. So this is our number line and then we have five here. We are using arrows to start the. We have the numbers negative one, two and three. We are using arrows so we start from negative two and ends at 5 or positive five. Then we have negative two. It starts from negative two and ends at what? Negative five. Two, positive two. Starting from 2 and ends at what? Positive five. Now who doesn't understand what I have done? **Hwan na enti asee?** Yes! look at this question again. Draw a number line Draw 4 arrows, draw 4 arrows each showing the integers 8. Let the arrow begin at the following points: negative three, two, negative 4 and 4. We are to....

Appendix 5 (33) TI: Ghanaian Language.

LESSON : THIRTY THREE
SCHOOL : ZONGO PRIMARY
CLASS : P5
TEACHER : " TI "
SUBJECT : GHANAIAN LANGUAGE (READING)
TOPIC : AKUAFO ATAMFO
DATE : 4TH MARCH, 1996

- 1 Tr. :enne dee ye be sua no, wato no din se:"Akuafo Atamfo ne n'aboafɔɔ". Akuafo Atamfo ne n'aboafɔɔ, Akuafo Atamfo ne n'aboafɔ. Na me pe se me bisa mo se Okuani kora wɔ ne hwan? Okuani kora wɔ ne hwan? Okuani ye kase Okuani a wɔ ne hwan? Catherine.
- 2 Catherine: Obia wɔɔ afuo.
- 3 Tr. : Obia wɔɔ afuo. Wose obia wɔɔ afuo. Woso wo adwene ye wo sen? Se ye kase okuafoɔ a.
- 4 Chd. : Obia wɔɔ afuo wɔdua aduane, aduane ma yɛdie.
- 5 Tr. : Obia wɔɔ afuo ana wɔdua aduane na yɛdie. Prince Agyei Kwarteng. Okuafoɔ, ye kase okuafoɔ a, ɛni den?
- 6 Prince : [No response].
- 7 Tr. : Collins
- 8 Collins : Obia wɔɔ ma aduane ba
- 9 Tr. : Yoo, me dawasi. Obia wɔɔ bia ma aduane eba, ana se obia odua, ɔye ma aduane ba, na ye nya bi die. ɔno ne akuafoɔ. Na ennea ben ɛna okuafoɔ no ɔtaa dua? ennea ben ɛna okuafoɔ no ɔtaa dua? Samuel.
- 10 Samuel : ɔtaa dua bankye
- 11 Tr. : Bankye, ɛden bio?
- 12 Chd. : Abe
- 13 Tr. : Abe
- 14 Chd : Mankani.
- 15 Tr. : Hagan.
- 16 Hagan : Ntosi
- 17 Tr. : Ntosi, ɛden bio?
- 18 Chd : Bankye
- 19 Tr. : Bankye
- 20 Chd. : Kooko
- 21 Tr. : Kooko
- 22 Chd. : Borɔdee
- 23 Tr. : Borɔdee Sa nnoɔma yi nyinaa, akuafoɔ na edua ɛma no ba, na yeso eye den? enya bi die. Me boa? Yoo, afei yese, ye **passage** no mu , yato no din se akuafo atamfo ene n'aboafɔɔ. Yɔbe dikan abisa akuafoɔ ennoɔma yese egyina hɔnom ɛma no ye no se na atamfo. Nea edikan no, me pe se me bisa see, ennoɔma ben saa ɛna eha Okuani ewɔ na akwan mu? ennoɔma ben saa?

- 24 Chd. : **Madam yes**
- 25 Tr. : ennoɔma bɛn saa?
- 26 Chd. : A fifideɛ
- 27 Tr. : Mhum
- 28 Chd. : ɛgya.
- 29 Tr. : ɛgya
- 30 Chd. : Yareɛ
- 31 Tr. : Mhum Catharine
- 32 Catharine : Nwura.
- 33 Tr. : Nwura.
- 34 Chd. : ɛmframa.
- 25 Tr. : ɛmframa. Mhum.
- 36 Chd. : ennomaa
- 37 Tr. : ennomaa. ɛhɛ!
- 38 Chd. : Nsuo
- 39 Chd. : Akorɔmfoɔ
- 40 Chd. : Anene
- 41 Tr. : Anene, Yoo. ennoɔma a mo akeka nyinaa ampa. Wie ne mu nyinaa ɛha akuafɔɔ ɛwɔ na akwan mu, a ɛno nti ɛnye dɛn? ɛmboa no ɛma ne nneɛma no nkɔso. Na me pɛ sɛ me bisa mo sɛ, ɛdɛn nti ɛna mose akorɔmfoɔ ɛye akuafɔɔ atamfo? Charlotte.
- 42 Charlotte: Owia na afuom nnoɔma.
- 43 Tr. : ɔwia na afuom nnoɔma, ɔwia na afuom nnoɔma. ɛdɛn bio?
- 44 Chd. : ɔɔ na afuom no a, wɔn tu, na obi nso afiri nakyiri akɔ tu.
- 45 Tr. : Yoo. Nti ɔkorɔmfoɔ ɛye okuafɔɔ atamfo. Obi nso ka mframa. Adɛn nti na mframa nso ye okuafɔɔ atamfo? Adɛn nti na mframa wɔ hɔ yi wɔye okuafɔɔ atamfo?
- 46 Chd. : Mframa ye adeɛ ɛnye. ɛka aduane a ye adua a, na ɛntumi nbɔ kɛsɛɛ.
- 47 Tr. : Mpa wo kyɛw ɛnti saa. Dɛn nti na mframa ye akuafɔɔ atamfo?
- 48 Chd. : ɛfa kɛsɛɛ a na ɛbubu ɛmbankye no.
- 49 Tr. : Bɔ wo nsam ma no
- 50 Chn. : [Clapping]
- 51 Tr. : wɔse nea ntiara mframa ɛye akuafɔɔ atamfo baako ne sɛ, sɛ mframa no bɔ, na sɛ ɛfa kɛsɛɛ a, ɛtumi ka nduane gu hɔnom. ɛbia na borɔdɛɛ yi afei na ɛhane ɛnyini. Na ɛno, na mframa bɔ kɛsɛɛ na abu no ahwɛ. ɛnti no ɛntumi ɛma borɔdɛɛ no ɛntim ɛnyini sɛdɛɛ akuafɔɔ no pɛ nono. ɛno nti no, ɛkwan biso no, ɛtimi ma ne bɔ ka. Obi nso sɛ ɛgya. Adɛn nti na ɛgya ɛye okuafɔɔ atamfo? Samuel Oppong
- 52 Samuel : [No response]
- 53 Tr. : Constance.
- 54 Constance: Obi hye afuo na ɛgye firi nsam kakra a, ɛbɛkɔ akɔ sɛɛ ne nnoɔma no.

Tr. : Wose sen?

55 Constance: Obi hye afuom na se nipa korɔ egye firi ne nsam, na se ekɔtɔ obi afuom, ebe tumi asee nipa korɔ afuom na akɔtɔ ne dee no mu.

56 Tr. : Yoo. Wose se obi ha ne dee ana se obi hye na asase, na se obi nso aye na afuom ewɔhɔ nom a, egya no tumi kɔ tom. Na enno, obi nnɔbaee anaa se obi afuo a wa ye no, na ehye no, na aye den? Akɔ, akɔ hye afra nneema no nyinaa. enno nti no, enno nso tumi asee ee, okuafo ne nfudee ana se ne nneema wɔ yeye. Yoo, afei obi. Yoo, afei obi soso se mmoa. Na mmoa no kwan ne ben so enna emmoa timi gyina hɔ se akuafo atamfo? ekwan ben so? ekwan ben so? enna emmoa timi gyina hɔ se akuafo atamfo? Stephen Oduro.

57 Stephen : ebi timi keka ahaban no so, na bankye aye basaa.

58 Tr. : emmo. Wose emmoa no bi etimi keka ahaban no so. Na afuo no aye den? Nnɔbaee aye den? Aye basaa. eden bio?

59 Chd. : emmoa no bi so kɔ hye bankye no mu na eyi, wa wi.

60 Tr. : emmoa no bi so etumi dweridweri asase no na kakra noa abɔ no na waye den? Na wa wi. Na edeben bio? Christi.

Christi : Mmoa no bi nso etumi tutu asase no kɔ asiee kɔ see bankye no.

61 Tr. : Mmoa no bi nso etumi tutu asase no kɔ asiee kɔ see bankye no. eden bio?

62 Chd. : Mmoa no bi nso tumi ba... wɔm didi di bankye no asi a, na wɔm aboniboni mu tokoro na wɔm asee no.

63 Tr. : Yoo, eye . Me daa ase. enti wie nyinaa: egya, nsuo, emmoa, akorɔmfo. wie nyinaa ye den? Okuafo atamfo. Wɔm gyina hɔnom sedee ebe ye a okuafo nneema ana se na dwuma wɔyɔ no, enye den? enkɔso. Yahunu na tamfo no enneema no bia eha no. Me pe se mo keka mbaakobaako okuafo atamfo no bi na me ntie Mhum.

64 Chd. : Nsuo

65 Tr. : Nsuo

66 Chd. : ee, mframa

67 Tr. : mframa. Collins

68 Collins : emmoa

69 Tr. : emmoa. Constance.

70 Constance: egya

71 Tr. : egya. Anita.

72 Anita : Yaree

73 Tr. : Yaree. Yoo. Wie no nyinaa gyina hɔ seden? Okuafo atamfo. Yen bra na abofo so Na abofo Ye kase okuafo abofo a, ana enno kora no ee, ekyere sen?

74 Chn. : [Noise]

75 Tr. : ekyere sen? Ye kase akuafo abofo a, ekyere sen? Gilbert.

76 Gilbert : eboa no ma nafuo yɔ ba

77 Tr. : Hwan na eboa no? Ye kase akuafo abofo a, enne den? Saa na mepe ekyere. Mhum.

- 78 Chd. : enno aboafɔ no kyere se, eboa na afuo no na nafuo no ye yie.
- 79 Tr. : Isaac wo so wa adwene kyere wo seden? Se ye kase akuafo aboafɔ a, ase kyere sen?
- 80 Isaac : Se nneema akuafo ye afuo a etumi boa no. ebi ne awia
- 81 Tr. : ebi ne awia. Wɔse ennoɔma eboa akuafo ema ne nnoɔma ekɔso ebi ne awia. Charlotte ebi nso ne den?
- 82 Charlotte: Sekan
- 83 Tr. : Sekan. Yoo
- 84 Chd. : Nsuo.
- 85 Tr. : Me npe wo din. Agyei Prince
- 86 Agyei : Nsuo
- 87 Tr. : Nsuo. Gladys, ebi nso ne den?
- 88 Gladys :emframa
- 89 Tr. :emframa. Clement.
- 90 Clement : [No response]
- 91 Chn. : **Madam, madam...**
- 92 Tr. : Amoah Felix
- 93 Felix : ee
- 94 Tr. : Emanuel.
- 95 Emanuel: ebi nso ne asɔ
- 96 Tr. : Betty Hagan. Ye kase akuafo aboafɔ a, enneema ben enna etimi boa akuafo, Mhum
- 97 Betty : eye a ekɔ hye nnɔtee
- 98 Tr. : ennoɔma ben? Collins
- 99 Collins : Bankye
- 100 Chd. : Hɛɛ!
- 101 Tr. : Mansa Comfort.
- 102 Comfort : Nsuo.
- 103 Tr. : Nsuo Samuel Oppong den bio?
- 104 Oppong : Mframa
- 105 Tr. : Mframa obi aka. Collins
- 106 Collins : ɔɔ afuo no ase nso a
- 107 Tr. : ɔɔ afuo no ase nso a! Mhum, eden bio? Christi.
- 108 Christi : Awia
- 109 Tr. : Awia. Yoo, enneema no a mo akeka no nyinaa eye nokware. Na obi si mframa. Ye dikan bubɔ no, ye ka na atamfo no. Obi kase mframa ye akuafo atamfo. Na seesei so ye ka na aboafɔ no obi soso se mframa koro yi ara esane ye okuafo aboafɔ. Mo gyede se den nti enna mframa eye akuafo aboafɔ ema ne afuo yɔ mu a? eden ntiara? eden ntiara?
- 110 Chn. : **Madam, madam...**
- 111 Tr. : Amoah Felix.
- 112 Amoah : Mframa no fa na afuo no ase ma na afuo no ye yiye

- 113 Tr. : W^ose Mframa no fa ɛɛ, aseɛ no mu. Na ɛkyere sɛ aboa nn^obaeɛ aye dɛbɛn? Aye yiye. ɛdɛbɛn bio? ɛnna obi soso ka awia. ɛɛ, Aden nti ɛnɛna awia ɛye okuafo^o abofo^o? ɛboa no w^o ne nneema mu, ne nn^obaeɛ mu. Aden ntiara? Betty Hagan.
- 114 Betty : ɛfiri sɛ, ɛɛ, me yere afiri.
- 115 Chn. : [Laughter].
- 116 Tr. : Alfred.
- 117 Chn. : **Madam, madam.**
- 118 Tr. : Christi.
- 119 Christi : ɛb^o a ɛma ne bankye no nyini.
- 120 Tr. : Mese dɛn nti na awia ye akuafo^o abofo^o, sa na me bisa. Dee me bisa ye no ɛnye ɛnno **answer** nono!
- 121 Chn. : **Madam, madam.**
- 122 Tr : Yeboah
- 123 Yeboah : ɛb^o, ɛb^o ne nno^oma no ho ma ne nno^oma no ye yiye.
- 124 Tr. : Eric
- 124 Eric : Sɛ nsuo no t^o kese ma asase no mu ye mmɛ a, awia b^o a ɛtimi ma asase no ye kama. ɛma nno^oma no fifi.
- 125 Tr. : Wa kyere na adwene. Obi nso nkyere na adwene. Mese dɛn ntiara na awia ɛtimi boa akuafo^o ana ɛye akuafo^o bofo^o? Adu Twum.
- 126 Twum : Awia no b^o a, ɛma na aduane no nyini ntem.
- 127 Tr. : Mhum
- 128 Chd. : Sɛ wo d^o wa afuo a, ɛtimi boa ma ne wo, ɛma no hye.
- 129 Tr. : Kakra me so mede bekaho ne sɛ awia no ɛboa ɛma nn^obaeɛ. Awia boa ɛma nn^obaeɛ ɛye dɛbɛn? ɛye yiye. ɛnno nti ɛnna ɛnn^obaeɛ no w^om hia awia no. Sɛ awia no kaho bi ɛma w^om de ye dɛbɛn? W^om de ye w^om aduane a w^om diee. Obi nso ka nsuo. Aden nti na nsuo ɛye akuafo^o abofo^o? Aden nti na nsuo ɛye akuafo^o abofo^o? Rita Edusei.
- 130 Rita : ɛye nsuo no ɛnna ɛt^o gu so ɛma aduane no ye yiye.
- 131 Tr. : W^ose nsuo no, ɛnno na ɛt^o gu ne nfudeɛ no so, ɛma no ye dɛn? ɛye yiye ɛdɛbɛn bio? ɛnna nsuo no ɛbetumi aye ama akuafo^o? Anna sɛ ye kase nsuo ye akuafo^o abofo^o a, ɛdɛn ntiara? Prince Agyei
- 132 Prince : Nsuo no boa akuafo^o ma. Sɛ nsuo no t^o a, asase no tumi ye mmɛ ma ne tumi tu na aduane na yade bi. W^ose nea ntiara, nsuo ye akuafo^o abofo^o ne sɛ, sɛ, ɛɛ, nsuo no t^o a, na aba sɛ ne nfudeɛ no a nyini a, ɛboa ma akuafo^o no timi ye dɛbɛn? ɛtimi tu aduane no. Sɛ ɛbia bankye w^oh^o yi, sɛ fam ɛye din a, ne tuo no, ɛye ana ɛye din. Nanso sɛ nsuo no t^o dee a, w^o tu a ɛye mmɛ. Afei nsoso me te sɛ obi kase ɛɛ, ɛwura. Dɛn ntiara na nwura ɛye akuafo^o na abofo^o. Ne sɛn ho? Constance.
- 133 Constance: ɛfifi a w^od^o ho a, ɛtimi ye kama
- 134 Tr. : Mese obi kase nwura. Dɛn ntiara na nwura ɛtimi ye okuafo^o na abofo^o? ɛhɛ dɛn ntiara?

- 135 Chd. : etimi ma asase no nyini. Na mo dua aduane no wo so a eye
yie
- 136 Tr. : Ne sen ho? Kyerekyere mu yiye.
- 137 Chd. : Sir, ema asase no nyini paa. Nti wo dua aduaba no a seesei a,
na a nyini.
- 138 Tr. : enye. Mese eden nti, na mo se nwura etimi gyina hɔ se
akuafoɔ abofoɔ? ekwan ben so? Alfred.
- 139 Alfred : Se wo tugu bankye no ase a ɛproɔ a, eka asase no ma
bankye no bɔ kama
- 140 Tr. : Bɔ wo nsam ma no.
- 141 Chn. : [Clapping].
- 142 Tr. : Wɔse se nwura no, se ɛɛ, a, ɛfu, ɛfuo no ase fu, na se wo dɔ
a, nwura no, wode gu asase no so a, ɛproɔ a, eka asase no ma asase no ye
deeben? eye papa. eno nti wo dua nneema wo so a, na aye den? Na eye
yie. Yoo edeben bio? Saa enneema yi a mo akeka yi nyinaa eye nnoɔma
ebo a akuafoɔ ɛwɔ ne nfudeɛ mu anna se eboa no wo ne na adwuma yɔ
mu. eno nti no yahunu akuafoɔ ennoɔma eboa no wɔ nfudeɛ mu.
Yakeka ne nyinaa awie. Afei na yeba abe kan passage no. Na ye ahunu
ɛɛ, akuafoɔ nneema eha no ene nnoɔma eyeden? eboa no wɔ ne nfudeɛ
mu anna se ne nkua ye mu. Nti ye nyinaa be ye dii na ya tie ɛɛ, passage
no, ahwe sedee ete ye:

OKUAFOɔ ATAMFO NE NABOAFɔɔ.

Mmoa bi te se akua tenten tumi see afifidi ne nnuaso aba nyinaa.
Nnipam so bi wohɔ a wɔdi nnuaba. Saa ara nso na anene ne
nnomaa bi nso see nnuaba ne afifideɛ nketewaa. Apuro, akusie,
nkura, kɔtɔkɔ ne kɔkɔte nso see nfudeɛ saa ara. Nfudeɛ a wɔ see
no bi ne kookoo, koko, amango, abe, aborɔbe ne asase nduane.
Ndwan, npɔnkye ne anantwie a, wɔni hwesofoɔ pa bi nso see
nfudeɛ. Me sane asi so bio. Nti fa wo aso bra ha. Mmoa bi te se akua
tenten tumi see afifidi ne nnuaso aba nyinaa. Nnipam so bi wohɔ a
wɔdi nnuaba. Saa ara nso na anene ne nnomaa bi nso see nnuaba ne
afifideɛ nketewaa. Apuro, akusie, nkura, kɔtɔkɔ ne kɔkɔte nso see
nfudeɛ saa ara. Nfudeɛ a wɔ see no bi ne kookoo, koko, amango,
abe, aborɔbe ne asase nduane. Ndwan, npɔnkye ne anantwie a,
wɔni hwesofoɔ pa bi nso see nfudeɛ. Afei me kan ne a, na wo akan
adi makyire. Ma ano si a, na ma bisa mu nsem. Na wa bua nsem no
ano. Mmoa bi te se akua tenten tumi see afifidi.

- 143 Chn. : Mmoa bi te se akua tenten tumi see afifidi.
- 144 Tr. : Nnuaso aba nyinaa.
- 145 Chn. : Nnuaso aba nyinaa.
- 146 Tr. : Nnipam so bi wohɔ a wɔdi nnuaba.
- 147 Chn. : Nnipam so bi wohɔ a wɔdi nnuaba.
- Tr. : Saa ara nso na anene ne nnomaa bi nso see nnuaba ne afifideɛ
nketewaa.

- 148 Chn. : Saa ara nso na anene ne nnomaa bi nso see nnuaba ne afifidee nketewaa.
- 149 Tr. : Apuro, akusie, nkura.
- 150 Chn. : Apuro, akusie, nkura, kɔtɔkɔ
- 151 Tr. : Kɔtɔkɔ ne kɔkɔte nso see nfudee saa ara.
- 152 Chn. : Kɔtɔkɔ ne kɔkɔte nso see nfudee saa ara.
- 153 Tr. : Nfudee a wɔ see no bi ne kookoo, koko, amango.
- 154 Chn. : Nfudee a wɔ see no bi ne kookoo, koko, amango.
- 155 Tr. : Abɛ, aborɔbɛ ne asase nduane.
- 156 Chn. : Abɛ, aborɔbɛ ne asase nduane.
- 157 Tr. : Ndwan, npɔnkɛ ne anantwie a, wɔni hwɛsofoɔ pa bi nso see nfudee.
- 158 Chn. : Ndwan, npɔnkɛ ne anantwie a, wɔni hwɛsofoɔ pa bi nso see nfudee.
- 159 Tr. : Mmoa ben enna yese wɔm nso tumi see, ɛɛ, fifidee no? Mmoa ben enna yese wɔm etumi see, nfifidee no? nfifidee no mmoa ben a? Alfred.
- 160 Alfred : Akua, akua. akua
- 161 Tr. : Yese akua tumi se nfifidee. Yese akua tumi se nfifidee. Ye sane ka mmoa ben bio? Se wo hwe passage no mu a eboa ben bio? enna wɔm tumi see nfifidee? Charlotte.
- 162 Charlotte: Nnipam
- 163 Tr. : Nnipam, nnipam no eden paa na yese wɔm tumi see no no? Nnipam no. Rita.
- 164 Rita : Abɛ.
- 165 Tr. : Woboa, enye saa. Mhum
- 166 Chd : Nnuaba
- 167 Tr. : Yese nnipam no tumi see nnuaba paa. Na ɛkyere se ɛkwan ben so na nnipam no tumi see nnuaba no? ɛkwan ben so na nnipam no tumi see nnuaba no? Nnuaba no gu fie a, na wɔm aba fie abɛ see no anna sen? Prince Agyei.
- 168 Prince : Yedi nnuaba
- 169 Tr. : Mese kwan ben so na nnipam no fa so see nnuaba no. Nnuaba no gu fie hɔ a wɔm ba fie hɔ na wɔm be fa see no? Mhum
- 170 Chd. : ɛwɔ afuom a, eso a, na wa be te akɔ di.
- 171 Tr. : Se ɛwɔ afuom na eso, na wɔbe te kɔ di a na ɛkyere se wa see nnuaba no? Kate.
- 172 Kate : Se ɛwɔ afuom a, eso a na wa kɔ keka ho asee no.
- 173 Tr. : Kwan ben so na nnipam no ɛfa so see nnuaba no. ɛkwan ben so? Wɔse nnipam bi nso see nnuaba. ennee, kwan ben so enna wɔm tumi see nnuaba no? Christi.
- 174 Christi : Se eso na se, se ɛwɔ afuom na se eso na epuro hunu a na wɔm akɔ di.
- 175 Tr. : Na adee apuru agu no, na wɔ kɔ fa adi no na ɛkyere wa see no? Kwan ben so enna nnipam no tumi see nnuaba no? Stephen Oduro.

- 176 Stephen: Wa dua no foforɔ no na wɔm akɔ akɔ yiɪ.
 177 Tr. : Bɔ wo nsam ma no.
 178 Chn. : [Clapping].
 179 Tr. : Bere a wa dua aduaba no, se wo dua aburo a, na wɔm eye deben? Wa kɔ tutu na wa yi aduaba no afifiri hɔ nom. enno nti no enna adee no a wope se wo dua no, enye den? enye yiye. Saa enna etee. Yese mmoa no bi sane wɔhɔ a wɔm tumi see nfifidee. eden mmoa nono. eden mmoa? Collins.
 180 Collins: Nnomaa.
 181 Tr. : Nnomaa ben? Nnomaa ben? Alfred.
 182 Alfred : Apuro
 183 Chn. : **Madam, madam.**
 184 Chd. : Anene
 185 Tr. : Anene, anene nso tumi see nfudee nketewaa no. Na mmboa ben na se wɔm eni he a, emmoa ben a? Mmoa ben enna se wɔm eni nhwesɔ papa bi a, wɔm nso tumi kɔ see nnuaba no?. Anita.
 186 Anita : Npɔnkye.
 187 Tr. : Charlotte.
 188 Charlotte: Ndwan
 189 Tr. : Rita.
 190 Rita : Nnantwie
 191 Tr. : Yoo, wie no mo nyinaa etumi yeden? etumi kɔ see nfudee. Na enno no me pe se me bisa se, na npɔnkye ne ndwan no a ekɔ see nfudee no, see afuo no, dee eya wɔm tumi kɔ see nono, eya na eben anna ewɔ akirikyiri? Saa nfuo no a npɔnkye ne ndwan tumi kɔ see nono eye a na eben anna se ewɔ akirikyiri? Catherine.
 192 Catherine: eye a na ewɔ nfikyirie.
 193 Tr. : Yoo, wɔse eye a na ewɔ nfikyirie. Nti na wɔm tumi kɔ hɔnom ekɔ kɔ see mm,ee eyi, nfuo no. Nti afuo ben a, ekwan ben so enna yebe tumi asi sa npɔnkye ne ndwan a wɔm eni nhwesofɔ yi afiri sedee ebeye a se wɔm ntumi nkɔ see afuo no? Kwan ben so enna yebe tumi abɔ ho ban? Sedee ebe ye a wɔm ntumi nkɔ see nfudee no. ee Constance.
 Constance: Wɔbe gye ho ban.
 194 Tr. : Wɔse wobe gye afuo no ho ban, sedee wobe ye a, npɔnkye ne ndwan a wɔm eni nhwesofɔ no wɔm etumi enye den? ekɔ see nfuo no. ekwan ben se bio? enna yebe tumi ayen mmoa yi sedee ebe ye a wɔm etumi ekɔ see afuo no? Adu Twum.
 195 Adu : Yebe ka wɔm agu ebuo mu na ya tu punu mu.
 196 Tr. : Bɔ wo nsam ma no.
 197 Chn. : [Clapping].
 198 Tr. : Wɔse npɔnkye ne ndwan a wɔm eni nhwesofɔ no esese yeka kyeree wɔm wura no mo na wɔde wɔm gu dan mu, na ye tu wɔm mu sedee ebe ye a wɔm nkɔ see ee efuo a, anna se nkorɔfɔ afuo a ye deben? Aye. Yoo eno nso ye.

- 199 Chn : [Noise]
- 200 Tr. : Na enneema ben na apuro eni akusie no mo yese wɔm taa see
no? enneema ben saa? enneema ben saa? Sarpong,
- 201 Sarpong : Kookoo.
- 202 Tr. : Kookoo. eden bio? Betty Hagan
- 203 Betty : Abe.. abe abe.
- 204 Tr. : Rita
- 205 Rita : Amango
- 206 Tr. : Amango, Constance.
- 207 Constance: Aborɔbe
- 208 Tr. : Aborɔbe. Saa mmoa yi tumi yeden? Tumi esee enneema yi
nyinaa. Mo gye de seden nti na wɔm pe abe ne kookoo ne nneema no?
Aden ntiara? Akusie ne nkura ne kɔtɔkɔ no, aden nti enna wɔm pe abe
enne amango? Aden ntiara? Christi.
- 209 Christi : Ya, na kɔm de wɔm. Wɔm kɔ a na wɔm akɔ di.
- 210 Tr. : Betty Hagan.
- 211 Betty : eye wɔm aduane.
- 212 Chn. : Noise.
- 213 Tr. : Yes.
- 214 Chd.. : efiri se wɔm di a wɔm nya ahoɔndin.
- 215 Tr. : Aden ntiara? Mhum Gilbert. Gilbert. Mese aden nti na apuro
ene nkura ene nkusie no wɔm pe abe ene aborɔb ene amango see ye no?
Aden ntiara? Eric
- 216 Eric : efiri se wɔm entumi ntutu bankye asi nkɔ wi. Nti na wɔm pe
saa nnuaba no.
- 217 Tr. : Yoo, nea nti a wɔm pe abe ne amango no ebere bia eye a na
aberee. Amango no sei aberee nti wɔ nya bebi tina. Na wa ye deben? Na
wadi. enti enna ema no ye saa no. Ye debe si ha sei, na obia akan na
mabisa mo asem. ekyere se mo abu ya nsem no ano.

Lesson duration: 21 Mins 30 secs.

Appendix 5 (34) T1: Science.

LESSON : THIRTY FOUR
SCHOOL : ZONGO PRIMARY
CLASS : P5
TEACHER : "T I"
SUBJECT : ELEMENTARY SCIENCE
TOPIC : USES & IMPORTANCE OF WATER
DATE : 13TH MARCH, 1996

- 1 Tr. : The other time we treated water. Water. We treated water and talked a lot about water. Now, today, okay, let me ask you. When you are very thirsty, when you are very thirsty. What do you take in? **Se nsuo kɔm de wo paa, eden na wo ye?**
- 2 Chd. : **Me num nsuo**
- 3 Tr. : Yes
- 4 Chd. : You drink water
- 5 Tr. : You drink water, okay you drink water. When you want to wash some of your things. When your school uniform is dirty. What are some of the things which you use to make the washing? Mhum Elvis.
- 6 Elvis : Water
- 7 Tr. : Mhum. What else? What else again? If your school uniform is dirty and you want to make it, dirty. What are some of the things that you need. Somebody is saying water. What else again? **Se wo sukuu atadee ye fi na se wo pe se wo be yi fi no a firi hɔ a, ennoɔma ben na wo be hia na wo de besi atadee no? enna obi se water. What else?**
- 8 Chd. : **Samina**
- 9 Tr. : **Samina, sen na wo be ka no borɔfo mu?**
- 10 Chd. : Soap
- 11 Tr. : Okay soap. I am interested in the water. What about if, let's say that our classroom is very dirty You want to clean up this room. What can we use?
- 12 Chd. : Use
- 13 Tr. : Mhum
- 14 Chd. : Water.
- 15 Tr. : Okay. Today we are going to see the importance of water or the uses of water. **ennoɔma yebe timi edi nsuo aye. Anaa se yebe hwe nsuo ne ho paa nfasuɔ.** Importance of water and uses of water. All of you. Uses of water
- 16 Chn. : Uses of water.
- 17 Tr. : Again
- 18 Chn. : Uses of water.
- 19 Tr. : Okay, **eden kora na nsuo yebe tumi de ayɔ?** What are some of the uses of water? Mhum. Yes what are some of the uses of water? Yes.
- 20 Chd. : We use, we use for drink

- 21 Tr. : Yes, we can drink some of the water. Yes what else? Mhum, for drinking. What else? Yes Antwiwaa.
- 22 Antwiwaa : For washing.
- 23 Tr. : For washing we use water for washing. What else again?
- 24 Chd. : For bath.
- 25 Tr. : **Yoo** for bathing. We use water for bathing. What else? Eric.
- 26 Eric : For cooking.
- 27 Tr. : For cooking. Yes what else again? We use water for bathing, drinking, cooking. Yes what else again? Mhum yes.
- 28 Chd. : For washing my back. For wash my house
- 29 Tr. : **Yoo**, for cleaning the house. What else again? He said we can use water to clean our house. **Se ye fie ye, fi a, yetumi de nsuo no bi ye den? epapapepa hɔ nom, ema hɔ nom nyinaa ye kama. eden bio?** What else? **Mhum. eden bio enna yebe timi ede nsuo aye?** Rita Edusei, Mhum
- 30 Rita : [No response]
- 31 Tr. : **Daniel Oppong edeben bio enna yebe tumi de nsuo aye? Lands hɔ, me nim se nnipa beberee akɔ hɔ nom. Mo kɔ hɔ nom a, ɔmo nsuo aye adebi wɔ hɔ. eden adee na wɔm de aye hɔ nom saa no? Wɔm a, etaa kɔ hɔ no, wo kɔ hɔ a, mahunu se wɔm de nsuo aye adeebi. eden adee na wɔm aye no hɔ nom saa? Elvis.**
- 32 Elvis : **We use to plant cassava.**
- 33 Tr. : Yoo, me nim se yede nsuo no bi agugu ee ndɔbae so na aye den? Atimi, anyini. Na me se **land hɔ, Crop Research hɔ**, moa mo akɔ hɔ da no. Ma hunu se wɔm de nsuo no bi aye biribi wɔ hɔ. eden na wɔm de aye hɔ saa no? Boakye.
- 34 Boakye : **Pipe.**
- 35 Tr. : enye **pipe** no na me ka. **Pipe** dee ma hunu. eden bio na ewɔ hɔ? Nsuo no wɔm de ate bi ema ne taee bebi. Na taee a etaahɔ no wɔm de ye den? Mo ahuu bebia nsuo no wɔ no? Moa mo akɔ hɔ no. Mm, nsuo no bi taahɔ nom. Na nsuo no wɔm de yeden? Nsuo nfasoɔ baako ne, ne se, eduru bere bi a, na wɔ hwe se yebe si ɔpe bere mu, na bebi wɔhɔ a, na nsuo no ho wo den nea? enno nti no, wɔ timi ye adee bi na etaa mu. Na ekyere se bebi a waye wɔ afuom no, se wɔhwe na se hɔnom no nsuo no ntumi ntɔ wɔ hɔnom a, nsuo ho wɔ den nea, wɔ ye adee bi na nsuo no taa mu. Afei wɔde eyi,...ye wɔ **pipe** ɔba bi wɔ hɔ nom. Wɔ de to saa nsuo no mu a, na etwee nsuo no, na afei wɔ de petipeti wɔ nnoɔma a wa dua no so. Se wahunu. ekyere se nsuo wɔhɔ nom yi, esane boa **plant** ema no ye deben? enyini. Nsuo enihɔ kora noa, plant no ebe ye den? Se ebe timi awuo. Se wahunu? Nti se wo kɔ **Crop Research** hɔnom a, wɔm de nsuo no bi ataae bebi a eberɛ bi a se eba **dry season** mu noa, wɔm nya nsuo, ede ye den? ede gugu ennoɔma no a wɔm adua no so. Nti nsuo ho nfasoɔ baako nso nono. Afei soso ennipa wɔhɔ ye, ye hia nsuo yiye papaapa. Dee nti a me kase ye hia nsuo no, se yebe fie a, nsuo yi bi na ye de ye **scrubbing, washing, cleaning, cooking, se**

wahunu? enoa bi so na yede ye, yede edware, de si nnoɔma, de ye nnoɔma beberee ewɔ fie. Saa nso na ye kɔ ɛɛ, ye, ye aduuma mu a, ɔhɔ nyinaa ye nom nsuo yi bi, ye de bi ye ya dwuma ne aneɛmaneema beberee wɔhɔ. ɛɛ, Akosombo. me nim se obia ekɔ hɔnom da. Den asem na wate ɛfa Akosombo ho? Mhum. **Yes Eunuch.**

36 Eunuch : Me te se yese ɛma **light**

37 Tr. : ɛɛn adeɛ na ɛma **light** no?

38 Eunuch : ɛɛ nsuo no

39 Tr. : Nti ya hunu **one importance ana another uses of water.**

Nsuo no ɛɛ, ayi, **dam** no a ewɔ Akosombo no, ɛɛ nsuo no na ɛgenerati [generate] **electricity** a ɛɛ **supply the whole** Ghana, se wahunu? Nti nsuo no **another importance ana se uses of water** no enono. Saa nsuo no a ewɔhɔ nom no, ɛnam so na ya nya dɛbɛn? Ye nya **electricity** ewɔ aha nom. ɛɛ, ye nya **electricity** ewɔ ɔman Ghana nyinaa. Afei nsoso, ɛɛ, se ye hwe ndwumandwuma mu a, bebi wɔ hɔ te se edwuma akese, akese, akese se **factory** ene **mines** adeadeɛ a ehɔ mo nyinaa wɔm useu [uses] nsuo ede ye adwuma beberee. Wɔm de bi hohoro ennoɔma mu. Na wɔm de bi ye **chemicals** ne adeade. Saa nso na ye kɔ **hospiti**[hospital] nso a, ɔhɔ nso wɔm useu [uses] nsuo yibi. enoa bi na wɔm de ye nduro. Wokɔ bebia wɔm ye nduro no a, wɔm de nsuo no bi ye nduro no. Na wɔm de nsuo no bi soso a, ɛɛ, esi nnoɔma. Wɔm a wɔm da hɔ nom nyinaa, wɔm be dware o, wɔm besi nnoɔma o, wɔm be tweetwee **hospital** hɔ o, ne nyinaa eye nsuo ye a bi enna yede ye. enti ye to ye ni a, yetumi hunu se, nsuo ye adeɛ bi a eho hia papaapa yie. Nsuo ye adeɛ bi a eho hia. ɛfiri se ennoɔma beberee a ye yɔ a nsuo enna ye yeden? Yede yɔ. Se nsu kɔm de wo a, eye ya paa kyene se ekɔm de wɔ. Nsu kɔm de wo a, eye ya paa sene se ekɔm be de wɔ. ɛfiri se ekɔm de wo a, na wo nya kakraa fa wo mene mu a, na woho atɔ wo. Nti nsuo dee, ekwan bia, ekwan hodoɔ pii no **water is very very important.** Nsuo, se dee yese aka no mbe sane ahye aseɛ. Na mabisa se, dee ya **discussi** [discusses] seesei ya no. Nea wo nte aseɛ no, ana se wo wɔ biribi wɔ hɔ nom a, nsuo ho nfasoɔ wɔ hɔ nom a, wo betumi aka. Wo wɔ asem bisa so a wo betumi abisa. Mhum Mansa Comfort. Mhum. Wowɔ asem bisa bi wɔ hɔ a, bisa ana se wo wɔ nsuo ho nfasoɔ eka a, ka kyere yen, Mhum. Yoo, enno dee se obi wɔ asem bisa wɔ mbisa, ansa na ya twere dee yakeka no nyinaa agu so. Na afei ye **answer questions. Yes, Mhum. Rita** Edusei

40 Rita : [No response]

41 Tr. : **Okay, ansa na yebɛ, ɛɛ, twere some of the uses of water no, come around and let us practice some of these activities**

42 Chn : [Move to teachers table].

43 Tr. : **Go back, go back, go back.**

44 Chn. : [Murmuring].

- 45 Tr. : This is our basin. We have water in it. And as we have discussed already, we said we can use water for washing. So right now I want someone to wash this napkin for me.
- 46 Chd. : [Washing a napkin].
- 47 Tr. : What is she doing with the water?
- 48 Chn. : She is washing
- 49 Tr. : Washing what?
- 50 Chn. : The napkin.
- 51 Tr. : She is washing the napkin. This is one activity of what we can use water to do. She is washing the napkin, Okay. What am I doing?
- 52 Chn. : You?
- 53 Tr. : What am I doing?
- 54 Chn. : You are drinking
- 55 Tr. : Drinking what?
- 56 Chn. : Water.
- 57 Tr. : Okay. I have got rice in this saucepan. What am I doing?
- 58 Chn. : You are cooking.
- 59 Tr. : Am cooking what?
- 60 Chn. : Water
- 61 Tr. : Mm
- 62 Chn. : Rice
- 63 Tr. : Yes I am cooking my rice with water. Without the water I cannot cook the water rice. So I am cooking my rice with water. Go back, go back.
- 64 Chd. : Eei! Dada
- 65 Tr. : What am I doing with the water?
- 66 Chn. : You are...
- 67 Tr. : If you know it raise up your hand. What am I doing with the water? Yes Eunuch.
- 68 Eunuch. : You are sweeping the classroom.
- 69 Tr. : I am using water to do scrubbing. I am scrubbing the floor. So right now we have used water to scrub the classroom. We have used water to cook some food. We have used water to wash some clothes. So we see that water is very very important. Any questions? Obi ew² asem bisa? Mhum, Mhum. If you don't have any question go and sit down.
- 70 Chn. : [Take their seats].
- 71 Tr. : [Writes on the board]. These are some of the uses of water. Number one we use water for bathing. What is the meaning of we use water for bathing? **Mhum ekyerε sen?** We use water for bathing. Collins.
- 72 Collins : **Yεde nsuo no bi dware**
- 73 Tr. : **Yεde nsuo no bi dware.** We use water for cooking. For cooking. Sowah
- 74 Sowah : **Yε nom nsuo no bi**
- 75 Tr. : We use water for cooking. Akwaboa
- 76 Akwaboa : **Yεde nsuo no bi nua aduane.**
- 77 Tr. : Very good. We use water for bathing, for bathing, for bathing.
- 78 Chn. : [Noise]

- 79 Tr. : We use water for bathing. Yes Patricia
 80 Patricia : **Yede bi esi nno**ma.
 81 Tr. : Mhum
 82 Patricia : **Yede bi esi nno**ma.
 83 Tr. : For bathing . We use water for bathing. **Mhum** ekyere se...
 84 Chd. : **Yetumi de bi dware**
 85 Tr. : **Yede bi dware**. We use water for washing. For washing
 86 Chd. : **W**se
 87 Tr. : Mhum.
 88 Chd. : **W** si **nno**ma
 89 Tr. : Rita Edusei.
 90 Rita : **Yede nno**ma, **Yede nsuo no bi si nno**ma
 91 Tr : We use water for irrigation purpose Mhum, irrigation. **enno me kyere mo sen?** Irrigation no? Yes Eric try.
 92 Eric : **Yede bi gu ye d**bae so
 93 Tr. : **Yoo, se wo sa nsuo w** bebi na wo de gu wo **nno**ma so. We use water for scrubble. scrubble, scrubbing. Constance.
 94 Constance: **Yede bi hohoro ye** fie.
 95 Tr. : **Yoo yede bi hohoro na yede bi etweetwee ye veranda ene ye dan mu**. We use water in our factories. Mhum. Yes John Boakye try.
 96 Boakye : **W**m a **w**m **w**, fa no se dokita[doctor] no, **w**m debi edware ayarefo no bi, ede bi si **w**m **nno**ma.
 97 Tr. : Factories no, bebi te se mines, ne bebia ye ye fanta, ne Milo ne coke ne adeade no, eh nom nyinaa **w**m, ye sane bebia **w**m ye fish ew **mpowano ene bebia w**m ye tinapa nee sardine a egu konko mu no. Saa h no mo ne factories nyinaa **w**m useu [uses] nsuo no bi. Okay plants and animals also use water. Mhum, Mhum, Constance.
 98 Constance : **emma ene ndua nyinaa ehia nsuo**.
 99 Tr. : Very good. **W**m nyinaa hia nsuo. So from this point we have seen some of the importance of water. **Nsuo ho hia papaapa yie. Nneema beberee enna yede nsuo ye**. Any question? **Mhum, Mhum. Clement wo w** question bi **w**h
 100 Chn. : Noise. [Tr. organises her teaching aids]
 101 Tr. : Come around again, come around.
 102 Chn. : [Move to teacher's table].
 103 Tr. : Keep quiet. What do you see? Go back. What do you see? **Mhum. eden na mo hunu?**
 104 Chd. : **Ye hunu se**
 105 Tr. : **Mhum**
 106 Chd. : **Yehunu se nsuo no afa paper no**.
 107 Tr. : eden bio?
 108 Chd. : **Ye ahunu se paper no af**.
 109 Tr. : enno na obi aka no. eden bio? Af nkoa na wo ahunu? **Yes**.
 110 Chd. : Mahunu se **paper no te nsuo no ani**.

- 111 Tr. : **Very good!** W^ose sen? W^ose wa hunu se **paper** no tɛ nsuo no aye den? ete nsuo no ani. Yoo, hwe yiye. enno nso ye? Wo nim a pagya wo nsam.
- 112 Chd. : Ma hunu se **paper**, ee, **chalk** no ɛda aseɛ.
- 113 Tr. : **Very good.** Ya hunu se **paper** no ɛye den? ete nsuo no ani ɛna **chalk** no deɛ aye deɛben? Ak^o ak^o ayi ɛɛ
- 114 Chd. : Aseɛ
- 115 Tr. : Nsuo no ase. **Okay** wie kyerɛ se **object**, ɛɛ adeɛ bia wode be to nsuo mu a, ɛntumi nk^o aseɛ no, saa adeɛ no ye ɛyi: **floating object**. ɛnna deɛ wode betum a, ɛtumi k^o nsuo no ase no ɛye **sinking object**. Nti mo nk^o tena ase na yen suasua ho asem kakra.
- 116 Chn. : [Move back to their seats].
- 117 Tr. : Nti yahunu sɛ, yahunu sɛ ɛɛ. **Why is it that the paper didn't sink?** Aden nti na **paper** no ak^o nsuo no ase? Yede **paper** no tuum no aden nti na ak^o aseɛ? Patricia Boateng.
- 118 Patricia : **Paper** no mu w^o hɛri
- 119 Tr. : **Mhum, because the paper is what? Very light.** ɛmu w^o duru? ɛmu w^o hɛrɛ. ɛnti na aye den? Ak^o aseɛ no. **Why is it that the chalk sink? why?** Mhum.
- 120 Chd. : **Chalk** no mu w^o duru.
- 121 Tr. : Yoo, **chalk** no mu w^o duru. ɛnti no ye ahunu sɛ **light object they float in water**. ɛnno^oma ɛmu w^o hɛrɛ no nyinaa wode to nsuo mu a, ɛye deɛben?
- 122 Chd. : Na ete nsuo no ani
- 123 Tr. : **Heavy objects** nso soso **they sink when you put them in water**. ɛnno^oma ɛmu w^o duru no ɛnno nso wode to nsuo mu a, na aye den? Na ak^o nsuo no ase. **Okay you are going to mention some objects which when you put in water they float in the water.** ɛnno^oma wode to nsuo mu a nsuo no, ɛɛ, ɛbe ye, ɛntimi nk^o aseɛ. Na ɛmu be ye deɛben? ɛbɛtɛ ani. **You are going to mention some of these objects you know. Stop writing.**
- 124 Chn. : [Noise].
- 125 Tr. : **Okay, what are some of the objects which you think will float when you put them in water?** Mhum. ɛnno^oma ben saa, na mo gyede sɛ yede to nsuo, seesei a nsuo ɛsi ha yi, ye, yede tum a, ɛbe k^o, ɛɛ. ɛbe tete nsuo no ani. ɛdikan no ye hye aseɛ bisa ye no, ye hunu sɛ, yede **paper** no tumu no, ak^o aseɛ, na ɛtetɛɛ ani. Nti **paper is a floating object**. Mhum Antwiwaa.
- 126 Antwiwaa: Ahaban.
- 127 Tr. : Brobie.
- 128 Brobie : **Broom**.
- 129 Tr. : **Broom Yes?**
- 130 Adutwum : **Leaf**
- 131 Tr. : **Very good. Leaf.** Rapheal
- 132 Rapheal : **Rubber**

- 133 Tr. : Yoo, **what else again?** Mhum Amoah Felix
 134 Felix : **Pen.**
 135 Tr. : Pen! Will pen float? Okay come and try and see. Bring your pen and come. No, sit down. Amoah Felix come put your water in the pen and see whether it will float or sink. Put it in the water. So it is what? It is a floating object? Yes, what else again? Albert.
- 136 Albert : Pencil
 137 Tr. : Pencil
 138 Chn. : [Noise]
 139 Tr. : Mhum.
 140 Chd. : Lula [ruler]
 141 Tr. : Ruler, say that.
 142 Chd. : Ruler.
 143 Tr. : Yes give me more examples about floating objects. Yes.
 144 Chd. : Silver.
 145 Tr. : What type of silver? Yes Mhum
 146 Chd. : Rubber
 147 Tr. : Rubber, Mhum, what else. I want ten objects. Mhum
 148 Chd. : Sharpener
 149 Tr. : Sharpener? Okay Yes.
 150 Chd. : Eraser.
 151 Tr. : Eraser? Mhum, what else?
 152 Chd. : Pepper.
 153 Tr. : Pepper? Mhum
 154 Chd. : Tube
 155 Tr. : What's that?
 156 Chd. : Eh! the one in [points to a bicycle]
 157 Tr. : Okay, what else? Prince.
 158 Prince : [Inaudible]
 159 Tr. : So all what you have said are floating objects. Now we are going to see objects which when you put in water will sink. We have already tried chalk. We realised that when we put the chalk in the basin full of water the chalk did not float but rather it sink. So what are some of the objects you think when we put in the water will sink. Mhum Grace talk. Mhum.
- 160 Grace : Knife.
 161 Tr. : Knife, Mhum
 162 Chd. : Stone.
 163 Tr. : Very good. Mhum. What else? Floating objects, sinking objects, sinking objects.
 164 Chd. : Table
 165 Chd. : Shoc
 166 Tr. : Mhum
 167 Chd. : Door..
 168 Tr. : Mm?
 169 Chd. : Door!
 170 Tr. : Do you think if you put a ball in water the ball will sink?

- 171 Chn. : No.
 172 Tr. : Mhum
 173 Chd. : Watch.
 174 Tr. : Mhum, what else ?
 175 Chd. : Cassava.
 176 Tr. : Cassava, Mhum What else again?
 177 Chd. : Plantain.
 178 Tr. : Plantain Mhum
 179 Chd. : Cocoyam.
 180 Tr. : Mhum.
 181 Chd. : Sugarcane
 182 Tr. : Mhum.
 183 Chd. : Table
 184 Tr. : Mhum.
 185 Chd. : Yam
 186 Tr. : Mhum.
 187 Chd. : Palm nut
 188 Tr. : Mhum.
 189 Chd. : Stick
 190 Tr. : Mhum. What else again? Okay, now we have known the difference between a sinking object and a floating object. **εnno⊃ma a yeſe wode to nsuo mu a εntumi nk⊃t⊃ nsuo no ase ara εte ani no nyinaa no. εkyere ſε ſεn? εye floating objects. εnna deε wode tumu a wo nhunu bio. Deε wo bε hunu ne ſε na εw⊃ nsuo no ase no, εnno nso no ye** sinking objects. Any question? **Aha! Mo deε debia no** question. Then take your books and then..., Floating objects no, we have written about eight examples, add two to make it ten and then sinking objects you write ten of them. First, write the uses of water in your books. After that you come and write this. You add two of these to make ten. Then you write ten of the objects which are sinking objects. Take your books and then do the exercises.
- 191 Chn. : [Working]
 192 Tr. : Okay, what is a floating object? What is a floating object? What is a floating object? Mhum What is a floating object? Aha, Mhum. Eric.
- 193 Eric : Paper.
 194 Tr. : That is an example of a floating object. Yes.
 195 Chd. : **Adeε a wode to adeε ani a na ate ani**
 196 Tr. : **εdeεben ani?**
 197 Chd. : **Nsuo.**
 198 Tr. : **Yoo.** And then what is a sinking object?
 199 Chd. : **Adeε bia wode to nsuo mu a εt⊃ aseε.**
 200 Tr. : **εt⊃ aseε εk⊃ aseε.** Okay. Do the exercises.
 201 Chn. : [Writing].
 202 Tr. : John Boakye sit down and do the work.
 203 Chn. : [Working]
 204 Tr. : Charlotte Sarpong what are you doing?

205 Charlotte: [Inaudible].
 206 Tr. : **Mm, wose sen?**
 207 Charlotte:[Inaudible].
 208 Tr. : **Obi hwan na afa wo pen?**

APPENDIX 5 (35) TJ: Ghanaian Language

LESSON : THIRTY FIVE
 SCHOOL : WA PARA-MILITARY PRIMARY
 CLASS : P3
 SUBJECT : GHANAIAN LANGUAGE (READING)
 TOPIC : AGYA POKU AKWANTUO
 TEACHER : " TJ "
 DATE : 22ND MARCH, 1996

- 1 Tr. : Nnamfo
- 2 Chn.: Nnamfo
- 3 Tr. : Nnamfo
- 4 Chn.: Nnamfo
- 5 Tr. : Merekɔhwehwɛ
- 6 Chn.: Merekɔhwehwɛ
- 7 Tr. : Merekɔhwehwɛ
- 8 Chn.: Merekɔhwehwɛ
- 9 Tr. : Amanneɛ
- 10 Chn.: Amanneɛ
- 11 Tr. : Bɔɔs
- 12 Chn.: Bɔɔs
- 13 Tr. : Efa
- 14 Chn.: Efa
- 15 Tr. : Asɔ
- 16 Chn.: Asɔ
- 17 Tr. : ɔsram
- 18 Chn.: ɔsram
- 19 Tr. : A pae
- 20 Chn.: A pae
- 21 Tr. : Bɛbiara
- 22 Chn.: Bɛbiara
- 23 Tr. : Yes
- 24 Chn.: Huntahunta, Papa Poku, Maame Atta, nnamfo, merekɔhwehwɛ, amanneɛ, amanneɛ, bɔɔs, Efa, Asɔ, Aduɛ
- 25 Tr. : ɔsram
- 26 Chn.: ɔsram ɔsram ɔsram ɔsram/ A pae, a pae, baabiara.
- 27 Tr. : Pine ha, pine ha, pine ha. Moa aka no mo npɛ ne moa akyɛ. Pine wakyi, pine wakyi. Yes ko so.
- 28 Chd : Huntahunta, Papa Poku, Maame Atta, nnamfo, merekɔhwehwɛ, amanneɛ, amanneɛ, bɔɔs, Efa, Asɔ, ɔsane
- 29 Chd : ɔsram
- 30 Chd.: ɔsram, apae, baabiara
- 31 Tr. : Yes
- 32 Chd.: Huntahunta, Papa Poku,* Maame Atta,**
- 33 Chd : Nnamfo

- 34 Chd. : Nnamfo
- 35 Chn.: Merek᳚hwehwε,
- 36 Chd : Merek᳚hwehwε,
- 37 Chn : Amannee
- 38 Chd.: Amannee
- 39 Chd: Mo mm᳚ mo nsam ma no.
- 40 Chn.: B᳚᳚s, Efa, As᳚, ᳚sa/᳚sram, apae, babiara
- 41 Tr. : Hwan na ebetumi?
- 42 Chd.: Mea
- 43 Tr. : Yes Amos
- 44 Amos.: Huntahunta, Maame Atta
- 45 Chn : Nnamfo
- 46 Amos: Nnamfo, merek᳚/mererek᳚hwehwε*
- 47 6thChd: Amannee
- 48 Amos: Amannee
- 49 6thChd: B᳚᳚s
- 50 Amos: B᳚᳚s
- 51 Chd.: Mo mua mo ano.
- 52 Amos.: Efa, As᳚ ** ᳚sanaa
- 53 Chn.: ᳚sram.
- 54 Amos. : ᳚sram.
- 55 Chn : Apae.
- 56 Amos: Apae, baabiara.
- 57 Chn. : [Talking together].
- 58 Tr. : Hee! Huntahunta.
- 59 Chn : Huntahunta.
- 60 Tr. : Papa Poku..
- 61 Chn.: Papa Poku
- 62 Tr. : Maame Atta
- 63 Chn.: Maame Atta
- 64 Tr. : Nnamfo.
- 65 Chn : Nnamfo
- 66 Tr. : Merek᳚hwehwε
- 67 Chn : Merek᳚hwehwε
- 68 Tr. : Amannee
- 69 Chn.: Amannee
- 70 Tr. : B᳚᳚s
- 71 Chn.: B᳚᳚s
- 72 Tr. : Efa
- 73 Chn.: Efa
- 74 Tr. : As᳚
- 75 Chn : As᳚
- 76 Tr. : ᳚sram
- 77 Chn : ᳚sram
- 78 Tr. : Apae

- 79 Chn.: Apae
80 Tr. : Baabiara
81 Chn.: Baabiara
82 Tr. : Hu..., pine wakyi. Huntahunta
83 Chn.: Hunta
84 Tr. : Yei a yaka eye den?
85 Chn : [Talking together].
86 Tr. : He, wo ma wo nsa soa na wo aka. Huntahunta eye den?
87 Chd : Kuro.
88 Tr. : Kuro. Papa Poku dee mo nim no. Papa Poku dee ɔye nipa. Maame Atta nso ye nipa. eye. Hwan na wo betumi ede Papa Poku aka asem? Papa Poku wo de be ka asem. Papa. Mhum .Hwan na ebe tumi de aka asem? Ka na me ntie. Mhum.
89 Chd.: Papa Poku ne yere ne Maame Atta.
90 Tr. : Mmo, mo mmɔ mo nsam ma no.
91 Chn.: [Clapping].
92 Tr. : Papa Poku ne yere ne Maame Atta. Maame Atta hwan na ebe tumi de aka asem? Hee! **One by one. Yes ka.**
93 Chd.: Maame Atta ne kunu ne Papa Poku.
94 Tr. : Kɔ so.
95 Chd : Maame Atta ne kunu ne Papa Poku.
96 Tr. : Mmo. Pine wakyi. Nnamfo fa ka asem ma yen tie.
97 Chd.: Me nnamfo ne me nua nomo.
98 Tr. : Wo nka hwee.
99 Chd.: Mbɛ tumi.
100 Tr. : Wo.
101 Chd.: Ne nnamfo ne Asɔ.
102 Tr. : Hwan nnamfo ne Asɔ? Wo nka huu. Hwan nnamfo ne Asɔ?
103 Chd.: Efa ne nnamfo ne wɔ mo.
104 Tr. : Ka.
105 Chd.: Efa ne nnamfo ne wɔ mo.
106 Tr. : Mmo, mo mmɔ mo nsam ma no.
107 Chn : [Clapping].
108 Tr. : Merekɔhwehwe, merekɔhwehwe, Mhum, ka ma me ntie.
109 Chd.: Merekɔhwehwe bɔɔl no.
110 Tr. : Ka.
111 Chd.: Merekɔhwehwe bɔɔl no.
112 Tr. : Merekɔhwehwe bɔɔl no, wo anka no kese a ye nte.
Amannee, amannee
113 Chn.: **Sir, sir, sir, sir**
114 Tr. : Mutala
115 Chn : [Talking together]
116 Tr. : Hee! Mutala!
117 Mutala: [No response].
118 Tr. : No
119 Chd.: Me kɔbɔ amannee. [Not nominated]

- 120 Tr. : [Points to a child].
- 121 Chd.: Me kɔbɔ amannee.
- 122 Tr. : Me kɔbɔ amannee. Kɔ wakyi.
- 123 Chn.: [Talking together].
- 124 Tr. : Bɔɔs, bɔɔs, bɔɔs, aha Bee.
- 125 Bee : Kaa
- 126 Tr. : Dabi, bɔɔs no. Mhum
- 127 Chn : Bɔɔs no wɔ he ne?
- 128 Tr : Mmo.
- 129 Chd.: Bɔɔs no wɔ he ne? [Not invited to talk].
- 130 Chn.: [Laughing].
- 131 Tr. : Efa, Asɔ,
- 132 Chn.: [Talking together].
- 133 Tr. : ɔsram. Mhum.
- 134 Chd.: Me kɔ sra.
- 135 Tr. : Dabi, ɔsram
- 136 Chn.: [Talking together]
- 137 Tr. : Mhum.
- 138 Chd : ɔsram apae
- 139 Tr. : ɔsram apae baabiara. Mhum
- 140 Chd : ɔse baabiara
- 141 Chn.: [Talking together]
- 142 Chd.: Baabiara mbɛ kɔ.
- 143 Tr. : Mmo, kɔ wakyi.
- 144 Chn.: [Talking together].
- 145 Tr. : ‘A’ foɔ nkoa na ɛbɛ ka. ‘A’ foɔ. Yes kɔ so.
- 146 Group A: Huntahunta, Papa Poku, Maame Atta, nnamfo/baabiara, amannee
- 147 Chn : [Talking together]
- 148 Group A: Bɔɔl, Efa, Asɔ, ɔsram, apae baabiara.
- 149 Tr. : B
- 150 Group B: Huntahunta, Papa Poku.
- 151 Tr. : Hee! Tenase
- 152 Group B: Maame Atta. nnamfo/merekɔhwehwe [In the midst of noise] amannee, bɔɔs, Efa, Asɔ, ɔsram/apae, baabiara.
- 153 Tr. : Sit down, sit down, sit down. B sit down. Ye kom
- 154 Chn : [Talking together].
- 155 Tr. : Wo anyɛ kom a, me mawo mba ha bi, alright
- 156 Chn.: [Talking together].
- 157 Tr. : Adeɛ a yebe kan no yebe ye Twi rhyme no ansa. Yebe ye Twi rhyme no ansa na ya kan. ɛgyire me paa na me be kan. Mo ayi no ye baako pɛ. Ansa na yebe kan no, yebe ye Twi rhyme. Twi rhyme.
- 158 Chn : Twi rhyme.
- 159 Tr. : ɛye. Alright, ‘A’ mo nsore ngyina hɔ
- 160 Group A: [Stands up]
- 161 Tr. : Yes ‘A’ Twi rhyme. Yes

- 162 Group A: Paa ne Krofo
 163 Tr. : eyɛ, hwan na ɛbɛ tumi aka?
 164 Chn.: **Sir, sir.**
 165 Tr. : Bra, Helena. Hee!
 166 Chn.: [Talking together].
 167 Tr. : 'A' Helena Anokye
 168 Helena: **Sir.**
 169 Tr. : Kɔ so
 170 Chn.: [Talking together]
 171 Helena: Kwame Duro kɔ twaa kwadu de kɔ ma tikya Duro. T. T. T. T. Tikya Tinkorang te Takoradi tɔn tawa torɔtorɔ. Atta foro pata kɔfaa ɛta baa ma yɛ kaa ntafoɔ nkwan. Ni, na ma te sɛ Atta awu da Tafo nkwanta. Dente ee! Dente, wahunu sɛ Dente ne Dentaa redi agorɔ na Dente afre Dente abɔ Dentaa dua sɛ, sɛ Dentaa kɔ Dente soa Dente nnya no.
 172 Tr. : Mmo, mo mmɔ mo nsam ma Anokye.
 173 Chn.: [Clapping]
 174 Tr. : **Good, Bee, Ta, hee!**
 175 Chn.: [Talking together].
 176 Tr. : Korankye bra. Toaso
 177 Chn.: [Talking together]
 178 Tr. : Toaso. Mhum.
 179 Korankye: Agya Kwapam kɔ apam kɔ hunu mampam, gyae apam ɛkɔ pam mampam ma mampam foro pam ma ɔpam kaseɛ wɔ no ma wɔ de kɔ dɔkita kɔ pam yɛ.
 180 Tr. : ɔnwieɛ, Yaw Ansah
 181 Korankye.: Yaw Ansah somaa ne ba Ansah sɛ ɔnkɔ nkɔtɔ nsa. Ansa na Ansah nduru hɔ no na nsa no asa.
 182 Tr. : Aka baako.
 183 Chn.: Me. me, me
 184 Tr. : [Signals Korankye to continue].
 185 Korankye: Agya Kwaku Tia, fa sikan teaa kɔ twaa tonto teaa be nwonoo nsoa teaa, de ketoo asuo teaa mu, eyii adwene teaa, ɔde kɔmaa ɔhene teaa, ma ɔhene teaa, teaa mpaboa teateawa mu bedaa nase teawa.
 186 Tr. : Mmo. Mo mmɔ mo nsam ma no
 187 Chn.: [Clapping]
 188 Tr. : Tena ase. Afei ya wie Twi rhymes no aka.
 189 Chn.: **Sir, sir, sir**
 190 Tr. : Twi ɛbɛ.
 191 Chn.: **Sir, sir, sir**
 192 Tr. : Mhum ka ɛbɛ.
 193 Chd.: Twe ma metwe na ɛma
 194 Tr. : Ka ɛbɛ. Ka ɛbɛ. Mhum
 195 Chd.: Twe ma metwe na ɛma akwadaa bɔ wa.
 196 Chn.: **Sir, sir, sir**
 197 Tr. : ɛbɛ kɔ so [Points to a child]

- 198 Chd : εβε. Borɔferε a εye dε na abaa da aseε. Twe ma metwe na εma koraa bɔ ye. Ahoma tenten na εte akokɔ bin. Borɔferε a εye dε na abaa da aseε. Borɔferε a εye dε na akyem kɔ so ayie
- 199 Tr. : εye, afei tena ase. Yeβε toaso.
- 200 Chn.: [Talking together].
- 201 Tr. : Afei ɔkwantunii page seven. Hee! Me kan ne nyinaa na wo tie. Me wie a, mme bisa mo ho asem. Ye kom. Page 7. Lesson 2. Tie no yiye. Dabi anopa, Papa Poku frε Maame Atta εnono dii nkɔmɔ bi. Papa Poku : Me pε sε me tu kwan εkɔ nkuro kεsε a εwɔ Asante ne
Bono Ahafo Amantam no mu no
Maame Atta : Saa amantam no mu dεε wo nnamfo bεn na εwɔ
hɔ?
Papa Poku : Me nkɔ me nnamfo . Mere nkɔ me nnamfo biara hɔ.
Mere kɔ hwehwε hɔ kwa. Aε me, sε me te hɔ yi, na me nim bε biara
ka me kurom ha ho ara ho. Saa asem yi ha me. enti mbe kɔ.
Dakorobi anopa. Dakorobi wɔ boa ne ho pε bɔɔs kɔ ye. Odi nna pii
ansa na wɔ sane aba Huntahunta. ɔbε duruu ye no, Maame Atta ani
gyee ye. Efa ne Asɔ ne wɔm nnamfo so nyinaa ani gyee ye. Wɔ dii
amanneε kakra. ɔpε nsuo ma no dware ye. Odware wieε no wɔ didi
ye. Da no na ɔsram apae nti Maame Atta ne nemma no nyinaa kɔ
tena Papa Poku hu. Maame Atta ka kyere Papa Poku sε ɔmmɔ wɔm
na akwam tuo no ho amanneε ana sε nsem..
εye ye de bε si ha. Afei dεε me bε bisa wo yi, hwe krataa no mu na yi
ano ma me nhwε. εε Papa Poku εhene fa na ɔfiri ee? Wo nim a na wo
ama wo nsa so. Yes, na wa aba abε ka. Bra ha. Mhum. ɔfiri? Ka.
- 202 Chd.: ɔfiri Huntahunta.
- 203 Tr. : ɔfiri Huntahunta. Mo mo mmɔ mo nsam ma no
- 204 Chn : [Clapping].
- 205 Tr. : ɔfiri Huntahunta Papa Poku ne yere ne hwan? Hee! One by one.
- 206 Chd.: Maame Atta
- 207 Tr. : Maame Atta Maame Atta ne mma ye sεn? Hee, wa kabi. Yes Maame Atta ne mma ye sεn?
- 208 Chd.: Mmeinu.
- 209 Tr. : Mmeinu. Maame Atta ba bεmaa no de sεn?
- 210 Chd.: Efa.
- 211 Tr. : Efa. ɔbaa no de sεn?
- 212 Chd.: Asɔ.
- 213 Tr. : Asɔ.
- 214 Chn.: [Talking together].
- 215 Tr. : Nkuro bεn? Nkuro mmeinu na Papa Poku pε sε wɔ kɔ hwehwε. Nkuro mmeinu bεn na na ɔpε sε ɔkɔ hwe soɔ? Nkuro mmeinu bεn? Mhum wo nim a bra ha. Nkuro mmeinu bεn na na ɔpε sε ɔkɔ hwe soɔ? Mhum.
- 216 Chd.: Nkuroso

- 217 Tr. : Dabi. Nkuro mmeinu ben na na ɔpe se ɔkɔ hwesoɔ?
- 218 Chd.: Bono Ahafo
- 219 Tr. : enne
- 220 Chd.: Kumasi
- 221 Tr. : Mo mmɔ mo nsam ma no
- 222 Chd.: [Clapping].
- 223 Tr. : Bono Ahafo. Wɔ tu kwan no, wɔtu kwan no se wɔ tena fidie bi mu. Saa fidie no koraa me nhunu bi da. Saa fidie no ye fre saa fidie no sen? Wo nim a be ka. efidie no ye fre no sen? efidie a wɔ tena mu no. efidie a wɔ tena mu no yefre no sen?
- 224 Chd.: Sir
- 225 Tr. : Hee!
- 226 Chd.: Bɔɔs
- 227 Tr. : Bɔɔs, bɔɔs. ee, Bɔɔs wɔhɔ yi ne kɔba ye sen? Baako ana mmeensa? Bɔɔs ne kɔba eye a eye sen?
- 228 Chn.: Sir, sir
- 229 Chd.: enan.
- 230 Tr. : enan.
- 231 Chn.: [Talking together]
- 232 Tr. : Yese bɔɔs ne kɔba ye enan. ekyere se, enan eye ampa?
- 233 Chd.: Yes sir.
- 234 Tr. : Bɔɔs kɔba ye enan, ennee, bɔɔs kɔba ye enan ennee taxi kɔba ye sen? Yes
- 235 Chd.: enan
- 236 Tr. : enan, taxi kɔba eye enan?
- 237 Chn.: [Talking together].
- 238 Tr. : eye. Taxi ne bɔɔs nea ehe na eso?
- 239 Chn.: Sir, sir, sir
- 240 Chd.: Taxi
- 241 Tr. : Taxi na eso?
- 242 Chd.: Sir, sir, sir, sir, sir.
- 243 Tr. : ennee wɔn hunu taxi da enna wɔn hunu bɔɔs da. eye.
- 244 Chn.: [Talking together].
- 245 Tr. : Papa Poku tuu kwan no, Papa Poku tuu kwan no wɔ dii nna kakra. Wo nim se wɔ dii nna be ye sen?
- 246 Chn.: Sir, sir, enna enan.
- 247 Tr. : enna enan.
- 248 Chd.: [Talking together].
- 249 Tr. : Yese wɔ be duru fie no, wɔbe duru fie no yese wɔ ye biribi ansa na wɔ didie. eden na wɔ yeye?
- 250 Chd.: Wɔ fa kyine.
- 251 Tr. : Dabi
- 252 Chd.: Wɔ dware ye
- 253 Tr. : Wɔ dware ye. eye. Tena ase. ee Yese Efa ne ani gyee ye. Wɔ no nko waa?

- 254 Chn.: No sir.
- 255 Tr. : W▷ ne hwan?
- 256 Chn.: Kwapa/nnamfo [Talking together].
- 257 Tr. : Dabi w▷ ne hwan?
- 258 Chd.: Ne nnamfo
- 259 Chn.: [Talking together].
- 260 Tr. : Tena ase, tena ase
- 261 Chn.: [Talking together].
- 262 Tr. : Tena ase
- 263 Chd.: [Talking together]
- 264 Tr. : εda noa Papa Poku dii amanneε no, na awia ayε den? Na
▷sram ayε den? Daa Papa Poku dii amanneε no na ▷sram ayε den?
- 265 Chn.: Na apae, na apae, na apae.
- 266 Tr. : Na apae, εyε tena ase
- 267 Chd.: **Keep quiet.**
- 268 Tr. : **Hee! Gabriel break.**
- 269 Chd.: [Talking together]
- 270 Int. : [Loud sounds of talking drums][used as bell].
- 271 Tr. : εyε, εε Maame Atta, εmmre a Papa Poku εdi na amanneε no,
εhene fa na na w▷tee? Papa Poku na w▷ dii na amanneε no ** He! Go
away!
- 272 Chn.: Sir, sir, sir.
- 273 Tr. : Maame Atta, bre a na w▷ dii amanneε no na w▷te fa he?
- 274 Chn.: Sir, sir, sir. and [Talking together].
- 275 Tr. : Mese obia ntena ase. Tena dee wo tee, tena dee wo tee. εhene
na wote?
- 276 Chn.: [Noise. Too much talking]
- 277 Tr. : Woa wobε sore, mbe yi wo section fo▷ nyinaa afiri mu. Tena
ase. Papa Poku, εmmre a na wodii amanneε no na Maame Atta w▷ he ne?
Wo nim a ma wo nsa so. Yes na w▷ w▷ he ne? Ka ma yen tie.
- 278 Chd.: Na w▷w▷ Huntahunta.
- 279 Tr. : Dabi
- 280 Chd.: Sir, sir, sir, sir.
- 281 Tr. : Yes odi amanneε no, na εhe ne na na w▷w▷? ▷ne no di
amanneε no
- 282 Chn.: Sir, sir, sir.
- 283 Chd.: :Na w▷w▷ Huntahunta
- 284 Tr. : εnyε w▷ no na w▷ ka yε no? Yes.
- 285 Chd.: Na w▷te akonnwa so.
- 286 Chn.: Sir, sir, sir.
- 287 Chd.: Na w▷te akonnwa so.
- 288 Chn.: [Talking together].
- 289 Tr. : W▷ dii amanneε wie yε no, yεse w▷yε biribi ansa na w▷ didie.
- 290 Chn.: Sir, sir, sir odware yε.
- 291 Tr. : Yes.
- 292 Chd.: [Talking together].

- 293 Tr. : Yes.
- 294 Chd.: Odware ye.
- 295 Tr. : Odware ye.
- 296 Chn.: [Talking together].
- 297 Tr. : Hwε book no mu. Hwε book no mu.
- 298 Chn.: [Talking together].
- 299 Tr. : Afei Sam Tawia kɔ so kan ma me ntie.
- 300 Tawia: **Dabi anɔpa**
- 301 Tr. : Tena ase.
- 302 Tawia: **Dabi anɔpa Papa Poku frε Maame Atta.**
- 303 Tr. : Kɔ so. Kan no den. Firi aseε
- 304 Tawia: **Dabi anɔpa Papa Poku frε Maame Atta ne no kɔ dii nkɔmɔ bi**
- Papa Poku: Me pε sε me tu kwan εkɔ εε, Bono, Bono Ahafo εnne nkuro akεsε yi mu. Akεsε yi bi so.**
- 305 Tr. : Wate dεε wɔka? Wɔ se. Yaa kan ne hɔ. wɔsε, wɔsε wɔpε sε wɔtu kwan kɔ εBono ne nkuro akεsε no mu soɔ. Wo nim sε wɔkɔ hɔ akɔ ye dεn? Wo nim sε εdεn na wɔkɔ hɔ ye no hɔ?
- 306 Chn.: Sir, sir, sir, sir.
- 307 Tr. : Wɔ kɔ ye dεn? Mmo ntie.
- 308 Chd.: ɔkɔ hwehwε ahenkuro. ɔkɔ hwehwε nkuro.
- 309 Tr. : Yεsε enno nti woso wo te Abenase ha no, sε wo pε sε wokɔ bεbia, wopε sε wokɔ wahunu? Yei yi aha yia na wɔte wɔn kɔ bεbia daa kyene da. Da kyene biara no εwɔ sε wokɔ hwehwε bεbi.
- 310 Chn.: [Talking together].
- 311 Tr. : Maame Atta bisa, ɔbisa no sε, adεn nti koraa na ɔpε sε ɔkɔ hwehwε hɔ.
- 312 Chn.: [Talking together].
- 313 Tr. : Maame Atta se adεn na ɔpε sε, ɔbisa ɔkunu. Yes εdεn nti na ɔpε sε ɔkɔ hwehwε hɔ.
- 314 Chd.: ɔpε sε ɔkɔ ye biribi wɔ hɔ.
- 315 Tr. : Dabi wa anka saa.
- 316 Chn.: [Talking together].
- 317 Tr. : Mhum, wa anka saa. Hee! Yaa.
- 318 Yaa.: ɔpε sε ɔkɔ hwe hɔ kwa.
- 319 Tr. : ɔsε ɔpε sε ɔkɔ hwe hɔ kwa, na wɔ hunu sεdεε ɔhɔ tεε.
- 320 Chd.: [Talking together].
- 321 Tr. : Huntahunta, Huntahunta no nipa bi εwɔ hɔ. Nipa bεn εnna εwɔ hɔ? Time a Papa Poku baa ye, nipa bεn nana εwɔ hɔ? Time a Papa Poku εbaa ye.
- 322 Chd.: Sir, sir, sir.
- 323 Tr. : Yes
- 324 Chn.: Sir, sir, sir, sir.[then, talking together]].
- 325 Tr. : Mhum
- 326 Chd.: Efa ne Adae

- 327 Chd.: Efa ne Adae
 328 Tr. : Efa ne Adae
 329 Chn.: [Talking together].
 330 Tr. : Hum, enne
 331 Chn.: [Talking together].
 332 Int. : Ye wie a yebε kɔ hɔ?
 333 Tr. : Wo betumi akɔ aba ansa na ma kɔ hɔ. Gye sɛ break over.
 Gye sɛ break over
 334 Int. : **Break over time bɛn**
 335 Tr. : Ansa na ma kɔ hɔ. Break over wɔm bεkɔ a wɔm nkɔ no
 ntɛm
 336 Chn.: [Talking together].
 337 Tr. : Tena ase.
 338 Chd.: [Talking together]
 339 Tr. : [Inaudible]
 340 Chn.: Papa Poku
 341 Tr. : Na Maame Atta mma ye sɛn?
 342 Chn.: Mmeinu.
 343 Tr. : ɔpanin.
 344 Chn.: Efa.
 345 Tr. : Adɛn nti na Papa Poku tuu kwan? Adɛn nti?
 346 Chn.: ɔkɔ hwɛhwɛ nkuro [then Talking together].
 347 Chd.: Ye nkɔ break?
 348 Chd.: [Talking together].
 349 Tr. : [Distributes pupils exercise books].

APPENDIX 5 (36) TJ: Mathematics

LESSON : THIRTY-SIX
 SCHOOL : WA PARA-MILITARY PRIMARY
 CLASS : P3
 SUBJECT: MATHEMATICS
 TOPIC : TELLING THE TIME
 TEACHER: "TJ"
 DATE : 27TH MARCH, 1996

- 1 Tr. : All of you.
- 2 Chn.: Mathematics
- 3 Tr. : Again
- 4 Chn.: Mathematics.
- 5 Tr. : This one? Yes This one, yes
- 6 Chn.: Read the clock
- 7 Tr. : Again
- 8 Chn.: Reading the clock.
- 9 Tr. : All of you again.
- 10 Chn.: Reading the clock
- 11 Tr. : Again
- 12 Chn.: Reading the clock
- 13 Int. : Yes I have seen it
- 14 Tr. : Again
- 15 Chn.: Reading the clock
- 16 Tr. : Yes the lesson is on mathematics. Reading the clock. Reading the clock. Today we are going to read the clock. We are going to know what the clock is
- 17 Int.: The car [addressed to an outsider to stop the car]
- 18 Tr. : Leaving the clock.[a kind of excuse to the pupils]. **** What do you see here? These are what? Drawing yi ye den? Wei, wei a ma drawdraw [draws] agu h▷ yi eyeden? Yes.
- 19 Chd.: Circle.
- 20 Tr. : Circle, eyε circle. Mo mm▷ mu nsam εma no.
- 21 Chn.: [Clapping].
- 22 Tr. : This is circle and I am going to change this circle into clock. I am going to change these circles into clocks. These are circles. Circle one, circle two, circle three I am going to change the face of the circle into clock. And this is how it looks like.[draws clock face from circles on bb.]
- 23 Chn.: [Talking together].
- 24 Tr. : I have change the circle into clock. Into the face of a clock. I have not finished. In every clock we have two hands. In every clock we have two hands. Do you know? Yes in every clock we have two hands. The hands are two. We, long hand and short hand. Long hand and short hand. [Draws the hour and minute hands of the clock].
- 25 Chn.: [Talking together].

- 26 Tr. : The long hand is called what? The long hand is called what?
Dapaah Doris
- 27 Dapaah: Minute
- 28 Tr. : Say minute hand.
- 29 Dapaah.: Minute hand.
- 30 Tr. : Again.
- 31 Dapaah.: Minute hand.
- 32 Tr. : Again.
- 33 Dapaah.: Minute hand.
- 34 Tr. : Minute hand. The long hand is called minute hand Minute hand. Clap for him.
- 35 Chn.: [Clapping].
- 36 Tr. : The short hand. Fa to table no so. The short hand. Yes Asante Emilia.
- 37 Emilia.: Hour hand
- 38 Tr. : All of you.
- 39 Chn.: Hour hand.
- 40 Tr. : Clap for her.
- 41 Chn.: [Clapping].
- 42 Tr. : Hour hand. After seeing the minute hand and the hour hand. Then we are going to work with the clock.. After knowing the minute and the hour hand then we are going to work with the clock. We have clock one, clock two, clock three. Look at the board and when I finish you will tell me the time. You see?
- 43 Chn.: Yes sir.
- 44 Tr. : Good. [Manipulates clock hands to read new time]
- 45 Chn.: Talk together and watch teacher.
- 46 Tr. : Alright we have** Yes, I have seen the hands up. Clock one, clock two, clock three. Alright clock one, what's the time? Clock one. Serwah Collins what's the time?
- 47 Serwah.: Five o'clock.
- 48 Tr. : Serwah Collins what's the time?
- 49 Serwah.: Five o'clock!
- 50 Tr. : Yes it's five o'clock. Clap for her.
- 51 Chn.: [Clapping].
- 52 Tr. : The time is five o'clock. Five o'clock. Clock two. Edith if you won't sit down I will not call you. You just put up your hand and I will call you. Clock two. Abrafi Margaret. Abrafi.
- 53 Abrafi.: One o'clock.
- 54 Tr. : Osei Prince. Yes.
- 55 Chn.: [No response].
- 56 Tr. : Yes Odame Daniel. Odame Daniel! Odame Daniel!
- 57 Odame.: [No response].
- 58 Tr. : Bawuah Doris.
- 59 Doris.: Twelve forty five
- 60 Tr. : Bawuah Doris
- 61 Doris.: Twelve forty five

- 62 Tr. : Clap for her.
- 63 Chn.: [Clapping]
- 64 Tr. : Now the last clock. The last one. Dapaah Doris. The last one. The last one, the last one. Yes Amos, Amos.
- 65 Amos.: Eleven thirty.
- 66 Tr. : Eleven thirty. Clap for her.
- 67 Chn.: [Clapping]
- 68 Tr. : And so these are the clocks. Clock one is five o'clock, five o'clock. Clock two, twelve forty five. Clock three, eleven thirty. Alright. These are the clocks. Then you see the clocks on the table. Then we are going to work practical. You are going to tell me the time. When I call you and say set the clock to two o'clock, then you set it and let me see. They have, one, three clocks. Three different clocks on the table. Three different clocks on the table. This is clock one, clock two, clock three. Alright clock one. This is the setting hand. This is the setting hand. Alright Odame Daniel set the clock, any of the watches to six o'clock.. Six o'clock. Six o'clock. Yes it is to six o'clock
- 69 Odame.: Walks to teacher's table and picks clock one
- 70 Tr. : Six o'clock. They are three you can change it. Six o'clock. Yes you. Six o'clock.
- 71 Chn.: [Laughing].
- 72 Tr. : Yes come and help. Juliana come and help
- 73 Chd.: Salomey
- 74 Tr. : Give it to Juliana. Sit down.
- 75 Odame.: [Goes to take his seat].
- 76 Tr. : Six o'clock
- 77 Chn.: [Talking together].
- 78 Juliana.: [Goes to the board]
- 79 Tr. : Yankyera, six o'clock
- 80 Chn.: [Talking together].
- 81 Tr. : Yes come and help
- 82 Chn.: [Talking together].
- 83 Tr. : Six o'clock.
- 84 Int. : Me pa wo kyeew, madam si wo anya hoho.
- 85 Tr. : W ntenase, meba seesei a. ***** Six o'clock. No. [draws six o'clock on the bb] You see. [Sets one of the clocks to six o'clock] This is six o'clock. These are Roman numerals. So when you are counting I stands for one. I as you are saying is a Roman numeral. More over you can indicate. There is no space here. enti enno waa ne se ebe ye a na wode k. Na saa.
- 86 Chn.: [Laughing].
- 87 Tr. : Alright yebe k so ahwe. Four o'clock. Four o'clock. Yes Vivian four o'clock. Maso. Yes four o'clock.
- 88 Vivian: Sets the clock and shows it to teacher.
- 89 Tr. : Ka kyere w n. Se enno waa nono. Is it four o'clock? Wo gyede se enno waa nono? Yes Amos. S h na w ny nkyere wo. Four o'clock. Oh! [Leaves class to meet a police officer relation on a visit].

- 90 Chn.: [Talking together]*****
- 91 Tr. : [Comes back] Four o'clock.
- 92 Chn.: Teacher wode kɔ ha sei na wode aba.
- 93 Tr. : Four o'clock.
- 94 Chn.: Wode kɔ ha sei na wo asane aba.
- 95 Tr. : Alright, wo ati. Alright, we go on. One o'clock.
- 96 Chn.: [Talking together].
- 97 Tr. : Dapaah, one o'clock. one.
- 98 Chn.: [Talking together]
- 99 Dapaah.: Sets the clock to one o'clock.
- 100 Tr. : Clap for her.
- 101 Chn.: [Clapping].
- 102 Tr. : Very good. The last one, nine o'clock. Bawuah, nine o'clock
- 103 Chn.: [Talking together].
- 104 Tr. : Nine o'clock, nine o'clock
- 105 Chn.: Sets the clock to nine o'clock.
- 106 Tr. : Clap for her.
- 107 Chn.: [Clapping].
- 108 Tr. : Very good. Alright then we come. Look at our time. Page sixty three Page sixty three. Our time. Yes. alright, we have four watches
- 109 Chn.: [Talking together].
- 110 Tr. : Watch one, two, three four. Alright what time is it? Your answer will be: It is. Your answer will be: It is three
- 111 Chn.: O'clock
- 112 Tr. : It is* That's all. Alright clock one. Vivian what time is it.
- 113 Vivian.: Three o'clock
- 114 Chn.: Sir, sir, sir.
- 115 Vivian.: It is three o'clock.
- 116 Tr. : Again
- 117 Vivian : It is three o'clock.
- 118 Tr. : It is three o'clock. Yes. Then number two. What time is it?
Osei Kojo.
- 119 Osei.: It is two o'clock. Two o'clock.
- 120 Chn.: [Laughing].
- 121 Tr. : Yes [Points to another child].
- 122 Chd.: It is one o'clock.
- 123 Tr. : It is one o'clock.
- 124 Chn.: Clap.
- 125 Tr. : Clock three. What is the time? Florence.
- 126 Florence: It is twelve forty five.
- 127 Tr. : It is twelve forty five. Number four. What is the time?
- 128 Chn.: It is nine thirty.
- 129 Tr. : It is nine thirty. Alright then I am going to change the dialogue of the figures again.
- 130 Chn.: [Talking together].
- 131 Tr. : I want every one to know how to read the clock. We have. This is twelve. Look at the board. This is twelve. Hwe board no so. efiri

- ha eba no nyinaa ye sixty minutes, sixty seconds. Sixty seconds make one minute.
- 132 Chn.: Sixty seconds make one minute. Sixty seconds make one minute. [self initiated action].
- 133 Tr. : Sixty minute one hour. We have sixty seconds, ke, ke, kee sixty. one minute and sixty minutes one hour. So we small, small, small dots, one, two, three, four, five! They give us five minutes. And when you have five times twelve is sixty. enti efiri ha yi a na ek⊃ be to ha eye one hour. One hour no wom sixty minutes. Sixty minutes no, wokye mu mmeinu a. Sixty wokye mu mmeinu a eye sen? Sixty wokye mu mmeinu efa ye sen?
- 134 Chn.: eye thirty.
- 135 Tr. : Thirty. enno nti ne mmeinu ma wo sen? Half, half, one. Half past ten, half past four. Tie no yiye. Wahunu w⊃ npe se w⊃ ka se the time is eleven thirty. The time is twelve thirty. He says half past eleven, half past eleven. Me se den?
- 136 Chn.: Half past eleven.
- 137 Tr. : Again.
- 138 Chn.: Half past eleven.
- 139 Tr. : Again
- 140 Chn.: Half past eleven.
- 141 Tr. : Half past eleven. Again.
- 142 Chn.: Half past eleven.
- 143 Tr. : A minute half past eleven. Half past eleven. Na ekyere se ab⊃ sen? . Half past eleven. Na ekyere se ab⊃ sen? Watch no ab⊃ sen? Yes, yes.
- 144 Chn.: Eleven thirty.
- 145 Tr. : Mo mm⊃ mu nsam ema no.
- 146 Chn.: [Clapping]
- 147 Tr. : Half past eleven. Na ekyere se ab⊃ eleven thirty. enti w⊃ ntimi nkase eleven thirty wose half past eleven. w⊃ ka pe na wo a hunu se eye eleven thirty. Alright, enno nti yede wei ato nkyen. Afei ebio, w⊃ ye a, wobe hunu se. ebe tumi aba se aka sixty nso, aduosia wo kye mu enan a, hwan na ebatumi akye mu? Sixty wo kye mu enan a, answer ye sen? Yes Ansa Gladys
- 148 Gladys.: Twenty
- 149 Tr. : Sixty wo kye mu enan a. Yes.
- 150 Chd.: Sir, ten.
- 151 Tr. : Sixty wo kye mu enan a. Dabi. Atta.
- 152 Chn.: Fifteen.
- 153 Tr. : Fifteen, ye mo mm⊃ mu nsam mano. Ye mo ahunu se akwadaa ketewaa mpo atimi aka. Akwadaa ketewaa paa watimi aka fifteen. Fifteen no nso ye nkase fifteen minutes to, fifteen minutes . Ye ka se quarter to. Quarter past. Quarter to. Mo nyinaa mo nka.
- 154 Chn.: Quarter past/ Quarter to [simultaneous production].
- 155 Tr. : Again

- 156 Chn.: Quarter to
 157 Tr. : Again
 158 Chn.: Quarter to/ Quarter past
 159 Tr. : Again
 160 Chn.: Quarter past
 161 Tr. : Quarter to. Quarter past. Again.
 162 Chn.: Quarter to. Quarter past
 163 Tr. : Again
 164 Chn.: Quarter to. Quarter past
 165 Tr. : Again
 166 Chn.: Quarter to. Quarter past
 167 Tr. : Again
 168 Chn.: Quarter to. Quarter past
 169 Tr. : Nti ye kase quarter to nba ekyere sen? Quarter to na aka sen? Na aka sen na abɔ. Aka sen? Quarter to na aka sen?
 170 Chn.: Fifteen minutes.
 171 Tr. : Mo mmɔ mo nsam ma no
 172 Chn.: [Clapping].
 173 Tr. : Amos, quarter to, na aka sen?
 174 Amos.: Fifteen minutes.
 175 Tr. : Fifteen minutes Na aka fifteen minutes ansa na abɔ. Quarter past. Quarter past eight. Na ekyere se abɔ sen? Quarter past eight kyere se abɔ sen? Yes Quarter past eight. Yes
 176 Chn.: [Inaudible].
 177 Tr. : Quarter past eight. Yes. ee quarter past eight na abɔ sen? Yes Quarter past eight na abɔ sen? Yes.
 178 Chn.: Eight fifteen.
 179 Tr. : Eight fifteen Eight fifteen. Hwe no yiye o! Nea me kyere wo nyinaa no se wo sua no yiye a wobɛ kɔ JSS enoa na wo be sua. enoa na wode bekɔ SSS. enoa na wobɛ sua wɔ SSS wode bekɔ university. Nti se wo sua no yie a! When you build a good foundation noa, then you are gone
 180 Chn.: [Laughing].
 181 Tr. : So that is quarter to, quarter past. Afei aka ades baako. Tie no yiye. Wie! Ma ka se half past, quarter to, half past, quarter to. Hwe efiri edunum ede ba ha nom no. Ye nkase fifteen minutes to twelve. Fifteen minutes to one. Fifteen minutes a, quarter to one, quarter to four. Quarter to five. Debia dee npaninfoɔ ka nono. Wo kɔ kɔ hwe watch mu na se aka minti dunum, ana se aka minti [minute] du. efiri minti du ekɔ kɔ si du no, ana five minutes to ana minti enson na abɔ edoɔn no. Ye kase ennoa ne quarter to, twenty to ten to. ebi ne quarter to one, quarter to one, aka fifteen minutes, ten minutes a, ten to one, five minutes to one, two minute to one. Afei yebɛ hwe nea wa sua no so. Page sixty three, page sixty three hɔ. No, watch one. Wo nim a me se ma wo nsa so. Me mpe se wo be kasa. Wo ma wo nsa soa, mbɛba hɔ. Watch one. Me so me hwe me dee no.

- 182 Chn.: esoro ana efam?
- 183 Tr. : efam , efam. Wo ehunu se wom a number akɔ si eight. Watch one. Watch one no me pe se wo be kan no borɔfo mu akyere me. Kan no borɔfo se dee me kyerew board no so no. Sadee me twerew board no so no. Yes watch one, Kan me tea.
- 184 Chn.: [Inaudible].
- 185 Tr. : No watch one. Emilia
- 186 Emilia.: It is one thirty.
- 187 Tr. : It is one thirty Is it one thirty? Watch one. No it is not one thirty. Is not one thirty. Yes
- 188 Chd.: Eight thirty
- 189 Tr. : Yes watch one. Yes.
- 190 Chn.: Twelve thirty.
- 191 Tr. : It is.
- 192 Chn.: It is twelve thirty.
- 193 Tr. : It is twelve thirty. It is twelve thirty. It is twelve thirty. Twelve thirty no yɛbe sane aka no borɔfo mu se sen? Ma kyere mo. Me npe se wo ka no twelve thirty. Me pe se wo kano borɔfo noa me kyere wo no. Wobe ka no sen? Twelve thirty yɛbe ka no borɔfo mu sen? Yes Osei Kojo.
- 194 Osei.: Thirty minutes to twelve.
- 195 Tr. : Yes thirty minutes to twelve. Saa? Twelve thirty no? Dee me twerew wɔ board sowɔ no. Half past no wo yira fi! Nti eye sen? Yes.
- 196 Chd.: Half past twelve
- 197 Tr. : Yes
- 198 Chn.: Half past twelve.
- 199 Tr. : Half past twelve. Bɔ wo nsam ma no
- 200 Chn.: [Clapping].
- 201 Tr. : Half past twelve. Number two. Number two. Yankyera Fosua
- 202 Fosua.: Half past nine.
- 203 Tr. : Number two. Yes
- 204 Chd.: Half past nine o'clock..
- 205 Chd.: It, it, it
- 206 Chd.: It is
- 207 Tr. : It is
- 208 Chn.: It is nine o'clock.
- 209 Tr. : It is nine o'clock.
- 210 Chn.: [Clapping][Not instructed]
- 211 Tr. : It is nine o'clock. Number three, number three. Odame, Odame
- 210 Odame.: It is two fifteen.
- 211 Tr. : Again.
- 212 Odame.: It is two fifteen
- 213 Tr. : It is two fifteen. Number four. Yes Hagar
- 214 Hagar.: It is seven o'clock.
- 215 Tr. : It is seven o'clock. It is seven o'clock. Alright, I want somebody to put the minute and hour hand on this. Mese me pe se obi be

- draw se abɔ eight ma yenhwɛ. Eight, eight o'clock. Yes Dapaah. Eight o'clock. centre. Ye ma yenhwɛ se abɔ eight o'clock.
- 216 Dapaah.: [Goes to the board, but unable to reach the circle to use]
- 217 Tr. : Ma me ye no fam. Ma me ye no fam ma wo.
- 218 Chn.: [Talking together]
- 219 Tr. : Quiet. Ye se abɔ nɔn wɔtwe. Ma me nhwɛ. Eight o'clock.
- 220 Chd.: [Goes to insert hands to let it read eight o'clock]
- 221 Tr. : It is
- 222 Chn.: Eight o'clock.
- 223 Tr. : Again.
- 224 Chn.: Eight o'clock.
- 225 Tr. : No
- 226 Chn.: It is eight o'clock.
- 237 Tr. : It is eight o'clock.. Alright. Five o'clock. Odame. Five o'clock. Wo, wo noa wobɛ abɛ ye bi se wa mua wo ano a, wobɛ ye bi. Five o'clock.
- 228 Chn.: [Talking together].
- 229 Tr. : Twɛɛ ma yen kan Yes. It
- 230 Odame: It is five o'clock.
- 231 Tr. : Four thirty, Four thirty. Emilia. Four thirty. Four thirty.
- 232 Chn.: [Talking together].
- 233 Emilia.: [Goes to the board].
- 234 Tr. : It is.
- 235 Emilia.: It is four thirty ..
- 236 Tr. : It is four thirty. Six o'clock. Six o'clock. Six o'clock. [Points to a child].
- 237 Chn.: [Talking together].
- 238 Tr. : Wei enye den.
- 239 Chn.: [Talking together].
- 240 Tr. : It
- 241 Chn.: It is six o'clock.
- 242 Tr. : It is six o'clock. So the whole thing is when you know where the hour hand is. When you know where the minute hand is. Then you finish.
- 243 Int. : Should I send my questionnaire?
- 244 Tr. : When you know where the hour hand is. When you know where the minute hand is Then you finished. That is that. Twelve o'clock, six o'clock. That is that.
- 245 Chn.: [Talking together].
- 246 Tr. : So you draw quarter to eight. A quarter to eight or fifteen minutes to eight. A quarter to eight. A quarter to eight, quarter to eight.
- 247 Chn.: [Working and Talking together]
- 248 Tr. : [Points to a child].
- 249 Chn.: [Goes to the board and draws]
- 250 Tr. : Are you sure quarter to eight. Who said no? Quarter to eight. Yes Emilia. Quarter to eight. Quarter to eight.
- 251 Int. : [Noise from another class]

- 252 Tr. : Are you sure? Look at that. No. Quarter to eight. Now I know
quarter to eight. Yes Yankyera. Quarter to eight.
- 253 Yankyera: [Draws]
- 254 Tr. : No. Quarter to eight Yes. Quarter to eight.
- 255 Chd : [Draws]
- 256 Tr. : Very good. Clap for him
- 257 Chd : [Clapping]
- 258 Tr. : Quarter to eight. Alright.

APPENDIX**5 (37) TJ: English**

LESSON : THIRTY SEVEN
SCHOOL : WA PARA-MILITARY PRIMARY
CLASS : P3
SUBJECT: ENGLISH (READING COMPREHENTION)
TOPIC : FINDING LOST ARTICLES
TEACHER: "TJ"
DATE : 22ND MARCH, 1996

1	Tr. :	<u>Under.</u>
2	Chn.:	<u>Under.</u>
3	Tr. :	<u>Under.</u>
4	Chn.:	<u>Under.</u>
5	Tr. :	<u>Under.</u>
6	Chn.:	<u>Under.</u>
7	Tr. :	<u>Under.</u>
8	Chn.:	<u>Under.</u>
9	Tr. :	<u>Behind.</u>
10	Chn.:	<u>Behind.</u>
11	Tr. :	<u>Behind.</u>
12	Chn.:	<u>Behind.</u>
13	Tr. :	<u>Lake.</u>
14	Chn.:	<u>Lake.</u>
15	Tr. :	<u>Lake.</u>
16	Chn.:	<u>Lake.</u>
17	Tr. :	<u>Mine.</u>
18	Chd.:	<u>Mine.</u>
19	Tr. :	<u>Mine.</u>
20	Chn.:	<u>Mine.</u>
21	Tr. :	<u>Hurry.</u>
22	Chn.:	<u>Hurry.</u>
23	Tr. :	<u>Hurry.</u>
24	Chn.:	<u>Hurry.</u>
25	Tr. :	<u>Find.</u>
26	Chn.:	<u>Find.</u>
27	Tr. :	<u>Find.</u>
28	Chn.:	<u>Find.</u>
29	Tr. :	<u>Cupboard.</u>
30	Chn.:	<u>Cupboard.</u>
31	Tr. :	<u>Cupboard.</u>
32	Chn.:	<u>Cupboard.</u>
33	Tr. :	<u>Cupboard.</u>
34	Chn.:	<u>Found.</u>
35	Tr. :	<u>Found.</u>
36	Chn.:	<u>Found.</u>
37	Chn.:	<u>Found.</u>

- 38 Tr. : Dear.
- 39 Chn.: Dear.
- 40 Tr. : Dear.
- 41 Chn.: Dear.
- 42 Tr. : Pillow.
- 43 Chn.: Pillow.
- 44 Tr. : Pillow.
- 45 Chn.: Pillow.
- 46 Tr. : Alright, go!
- 47 Chn.: Under, behind, late, hurry, cupboard, found, dear, pillow.
- 48 Tr. : Dapaah Doris come here. Come here. Quickly. Come here. Yes.
- 49 Dapaah: Under, behind, late, hurry, cupboard, found, dry
- 50 Tr. : Dear
- 51 Dapaah: Dear, pillow.
- 52 Tr. : Alright who can pronounce it? Gyimah Richard. Gyimah Richard. Yes.
- 53 Gyimah: Under, behind, late, mine, hurry, cupboard, found, dear, pillow.
- 54 Tr. : Clap for him. Very good.
- 55 Chn.: [Clapping].
- 56 Tr. : Who can try again? Yes Emilia
- 57 Emilia: Under, behind, late, man, hurry, cupboard, cupboard, found, dear, pillow.
- 58 Tr. : Clap for her.
- 59 Chn.: [Clapping].
- 60 Tr. : Alright, last one. Last one. Yes last one. What's your name?
- 61 Chd.: Rose Asantewaa.
- 62 Tr. : Rose Asantewaa Yes.
- 63 Rose: Under, behind, late, mine, hurry, cupboard, found,
- 64 Chd.: Dear
- 65 Rose: Dear, pillow.
- 66 Tr. : Clap for her.
- 67 Chn.: [Clapping]
- 68 Tr. : Very good. Yes a darling thing. Under. When we say under, under, under. Alright. My book . The book is under the table. The book is under the table. The chalk is under the table. Under. The duster is under the table. You see, under. Under, alright Dapaah Doris Yes. Mhum under. Use in a sentence.
- 69 Dapaah: The duster is under the table.
- 70 Tr. : Come and do it. Do it before you say it. Dapaah Doris. Yes.
- 71 Dapaah: [Puts the duster under the table and says]:The duster is under the table.
- 72 Tr. : Yes, the duster is under the table. Clap for her.
- 73 Chn.: [Clapping]
- 74 Tr. : Yes under. Yes come. Mhum. Quickly. Under
- 75 Chd.: Under the table
- 76 Tr. : Yes.

- 77 Chn.: [Puts the book under the table and says]: The book is under the table.
- 78 Tr. : Osei Kojo Again.
- 79 Chn.: The book is under the table.
- 80 Tr. : Yes, the book is under the table. Clap for him.
- 81 Chn.: [Clapping]
- 82 Tr. : Yes under. Last one. Yes last one. Yes Odame Daniel
- 83 Odame.: [Puts the chalk under the table and says]: The chalk is under the table.
- 84 Tr. : The chalk is under the table. The chalk is under the table. Alright we go on. Behind, behind, behind, behind, behind.. I am standing behind the cupboard. I am standing behind the cupboard. I am standing behind the wall. I am standing behind the wall. I am standing behind the table. Behind. Yes Emilia.
- 85 Emilia.: [Stands behind a table and says]: I am standing behind the table
- 86 Tr. : Clap for her. She is standing behind the table.
- 87 Chn.: [Clapping]
- 88 Tr. : Yes Vivian
- 89 Vivian.: [Stands behind a chair and says]: I am standing behind the chair.
- 90 Tr. : Yes you are standing behind the chair. Yes your name.
- 91 Chd.: Grace Agyapong.
- 92 Tr. : Grace Agyapong. Yes behind.
- 93 Grace.: [No response].
- 94 Tr. : Behind, Charles Opoku. Yes.
- 96 Opoku.: Behind the wall.
- 97 Tr. : I am
- 98 Opoku.: [Stands behind a wall and says]: I am behind the wall.
- 99 Tr. : I am. Yes Akoto, Akoto!
- 100 Akoto.: [Stands behind a wall and says]: I am standing behind the ball.
- 101 Chn.: [Clapping].
- 102 Tr. : You are standing behind the ball. Thank you. Alright. Late, late, late. I am late for school. The children are late for school. Kojo is late for school. My teacher is late for school. Yes late. Yes, yes, Vivian.
- 103 Chn.: My late for school today.
- 104 Tr. : I am late for school today.
- 105 Chn.: I am late for school today.
- 106 Tr. : Yes I'm late for school today. Odame Helena. Yes.
- 107 Helena: Teacher ni no aye late.
- 108 Chn.: [Laughing].
- 109 Tr. : Yes? [Points to another child].
- 110 Chd.: The children are late.
- 111 Tr. : The children are late. Clap for her. The children are late. Alright, mine, mine. This is mine book. This is mine book. This is mine pen. This is mine pen. This is mine stick. This is my stick. Yes Mutala.
- 112 Mutala.: This is * mine book.
- 113 Tr. : Try again. Mutala. Yes, yes

- 114 Mutala.: This is mine book.
- 115 Tr. : Yes, this is mine book. Now he is showing the book. Yes your name?
- 116 Chn.: Dora Serwah
- 117 Tr. : Yes Dora Serwah.
- 118 Dora.: This is my pen.
- 119 Tr. : Yes this is my pen. Yes Dapaah Doris
- 120 Doris.: This is my bag.
- 121 Tr. : This is my bag. This is my bag. Alright, hurry, hurry, hurry means quickly. Hurry the children are hurry. Hurry to school. Kofi is hurry to school. Ama is hurry to church. Kojo is hurry to church. Yes hurry. Yes Serwah Juliana. Yes hurry yes. Be attentive. Yes Dapaah Doris.
- 122 Chn.: Hurry up.
- 123 Tr. : Hurry up. Hurry up. Clap for her.
- 124 Chn.: [Clapping].
- 125 Tr. : Hurry up. Hurry up. Hurry up. Then find, find. I find my pen. I find my pen. I find the stick. I find the stick. Find, Helena.
- 126 Helena.: I find mine pen.
- 127 Tr. : I find mine pen. Clap for her.
- 128 Chn.: [Clapping].
- 129 Tr. : Akoto, find
- 130 Akoto.: I find my book
- 131 Tr. : I find mine book. Yes Afram
- 132 Afram.: I find my dress.
- 133 Tr. : I find mine dress. Cupboard, cupboard, cupboard, cupboard, cupboard. This is a cupboard. The books are in the cupboard. The chalk is in the cupboard. The bag is in the cupboard. Juliana Serwah cupboard.
- 134 Helena.: The cane is in the cupboard.
- 135 Tr. : The cane is in the cupboard. When you see your cane. This is a stick. The cane is in the cupboard. Yes Helena Anokye, cupboard, cupboard
- 136 Anokye: The pen in the cupboard.
- 137 Tr. : The pen is in the cupboard.
- 138 Anokye.: The pen is in the cupboard.
- 139 Tr. : The pen is in the cupboard. Yes.
- 140 Chd.: The book is in the cupboard.
- 141 Tr. : The book is in the cupboard. Alright found. Found my book. Kojo has found his book. Dear, dear me. Pillow, pillow, pillow. This is what?
- 142 Chn.: Pillow.
- 143 Tr. : Pillow. This is a pillow. The pillow is on the
- 144 Chn.: Table.
- 145 Tr. : The pillow is on the table. The chalk is on the
- 146 Chn.: Pillow
- 147 Tr. : Pillow. The book is on the
- 148 Chn.: Pillow.
- 149 Tr. : Alright, pillow. Yes Florence. Yes Mhum.

- 150 Florence : My pillow is sleeping.
 151 Tr. : Pillow, pillow. Yes.
 152 Chd.: My pillow is the table.
 153 Tr. : My pillow is on the table.
 154 Chd.: My pillow is on the table.
 155 Tr. : My pillow is on the table. Yes.
 156 Chn.: My bag is on the table.
 157 Tr. : Pillow
 158 Chn.: My pen is on the table.
 159 Tr. : No, no pillow, pillow. Yes Vivian.
 160 Chn.: My pen is on the pillow.
 161 Tr. : My pen is on the pillow. That is you put the pen on the pillow.
 Alright. It's alright. What's that? Sit down. Alright then we are going to
 read. Unit seven. Open to unit seven. Unit seven. Alright, open there.
Ramatu, stand up. Read unit seven, unit seven.
 162 Ramatu.: **Aha enye enno wa.**
 163 Tr. : **Yes louder.**
 164 Ramatu.: Unit seven. Page twenty one. I can't find it. Maame Mansah:
Sasu, isn't it time for school? It's now twenty past eight. Sasu: Yes it is
Mummy. I am late for school today. Maame Mansah: Hurry up. Put on
your shirt and go to school.
 165 Tr. : Yes sit down. Put on your shirt and go to school. Continue.
Put on your shirt and shorts and go to school. Yes Emilia continue. Yes sit
down. Mhum
 166 Emilia.: Sasu: Mummy please
 167 Tr. : Look at this. Yes.
 168 Chn.: Sasu: Mummy please, have you seen my pen? I can't find it.
Maame Mansah: Where did you put it yesterday? I put it on the table but it
isn't there now. Maame Mansah: Look for it again. Sasu: I am very late
mummy. I must go please. Maame Mansah: Wait a little. Yes I will
mummy. Mummy Mansah goes to the children's room and comes back
 169 Tr. : Yes. Maame Mansah goes to the children's room and comes
back. Alright, what you have read. It says it is talking about "I can't find
it". You can't find what? My pen. Alright in the passage we have Maame
Mansah, Sasu and they are conversing. They are talking. Alright.
 170 Chn.: [Talking together].
 171 Tr. : Turn to page twenty two, page twenty two. Yes. We continue
 reading. Maame Mansah here it is. I found it under your pillow. Yes
 Dapaah Doris.
 172 Dapaah.: Maame Mansah here it is. I found it under your pillow. Sasu:
Thank you very much Mummy. Now I can go to school. Good bye.
Mammy Mansah: Goodbye Sasu. Four days later Sasu's sister too could
not find her book. Ofosua: I can't find my book, Sasu have you seen it?
Sasu: No I haven't. Where did you put it yesterday? Ofosua: On the
cupboard. But I can't find it. Is in the. Is in your bag?
 173 Tr. : Is it in your bag?

- 174 Dapaah.: Is it in your bag? Sasu: No, it isn't. Looks for it in the cupboard. Ofosua looks in the cupboard. Sasu: Yes, is there?
- 175 Tr. : Is it there?
- 176 Dapaah.: Is it there? Ofosua: NO, it isn't. Oh dear what shall I do?
- 177 Tr. : Very good. Sit down. Oh dear! What shall I do? Alright, what you have read you are going to answer these questions. You are going to answer these questions. Alright turn to page twenty four. Page twenty four, page twenty four. Yes. Question (a) : What did Maame Mansah say to Sasu? Answers. (a) She said, 'Isn't it time for school?' (b) She said, 'Isn't it time for breakfast?' (c) She said, 'Isn't it time for play?' Yes. Anokye Helena, She said.
- 178 Helena.: She said, 'Isn't it time for school?'
- 179 Tr. : Very good. Clap for her.
- 180 Chn.: [Clapping].
- 181 Tr. : She said, 'Isn't it time for school?' Yes, Maame Mansah was telling Sasu, " Sasu , isn't' it time for school?" "Isn't' it time for breakfast?" "Isn't it time for play?" Then Maame Mansah said, "isn't it time for school?" Number two. What did Sasu put on? What did he put on. (a) His belt and hat. (b) His socks and shoes. (c) His shirt and shorts. Gyimah Richard
- 182 Gyimah: His shirt and shorts.
- 183 Tr. : Clap for him.
- 184 Chn.: [Clapping]
- 185 Tr. : His shirt and shorts. Sasu put on his shirt and shorts. Question three. What did Ofosua say to her brother? Answer (a) She said, 'I can't find my dress' (b) She said, ' I can't find my book.' (c) She said, ' I can't find my shoes.' Bawuah Doris.
- 186 Bawuah.: She said ' I can't find my book.'
- 187 Tr. : Clap for her she is correct.
- 188 Chn.: [Clapping].
- 189 Tr. : She said ' I can't find my book.' It seems you have got all you studied. Yes that is very good. The last one question four. What did Fosua found under her table? (a) An old book. (b) A yellow book. (c) A new book. What did Fosua found under * Yes
- 190 Chd.: New book
- 191 Tr. : Your name, your name.
- 192 Chn.: Dora Serwah
- 193 Tr. : Dora Serwah, yes.
- 194 Serwah.: A new book
- 195 Tr. : A new book. She found a new book. The last question. Where were the children going? Where? Where were the children going? Where were they going? (a) To church. (b) To school. (c) To hospital. Juliana Serwah.
- 196 Juliana.: To school.
- 197 Tr. : To school . The children were going to school. This shows you really understood what you had been reading. Alright, alright.
- 198 Chn.: [Talking together].

- 199 Tr. : Last reading. Page twenty three. Yes Gyimah. Sasu page twenty three. Yes.
- 200 Gyimah.: Sasu: Look round the sitting room. Did you bring it home yesterday? Ofosua: Yes I did. Now, now, now.
- 201 Tr. : Let's.
- 202 Gyimah.: Let's look under the table. Ofosua: Looks under the table. Ofosua: Eh!
- 203 Tr. : Ah!
- 204 Gyimah.: Ah! Here is my book! She looks at it. Oh no! It isn't. **
- 205 Tr. : Sasu
- 206 Gyimah: Sasu *
- 207 Tr. : Why?
- 208 Gyimah: Why?
- 209 Tr. : Why?
- 210 Gyimah.: Why? Why?
- 211 Tr. : Let me see it
- 212 Gyimah.: Why, let me see it. Ofosua looks at the book. It's book three. Ofosua: Yes it's book three but my is new. Is it eh, Sasu look under the cupboard and
- 213 Tr. : Sees
- 214 Gyimah.: Sees a book.
- 215 Tr. : Alright, Sasu looks under the cupboard and see a book. Last reading, last reading. Joyce. Sasu. Stand up. Put the book. Put the book. Yes Sasu Mhum.
- 216 Joyce.: Sasu: Ofosua look
- 217 Tr. : At that
- 218 Joyce.: At that. It, it, it book three and it new. It's your book. Ofosua *
- 219 Tr. : Takes
- 220 Joyce.: Takes the book and look
- 221 Tr. : At it
- 222 Joyce: At it
- 223 Tr. : Ofosua
- 224 Joyce.: Ofosua: Yes it's mine
- 225 Tr. : Thank you.
- 226 Joyce.: Thank you very much.
- 227 Tr. : Sasu.
- 228 Joyce: Sasu.
- 229 Tr. : Not.
- 230 Joyce: Sasu not at all Ofosua come.
- 231 Tr. : Come along.
- 232 Joyce : Come along.
- 233 Tr. : Let's.
- 234 Chn.: Let's Let us go to school. We are late.
- 235 Tr. : Thank you. Alright. Those who did not have the opportunity to read I hope next time you will also read. Those who will not get the chance to read , next time you will also read, loud to our hearing

- 236 Chn.: [Talking together].
- 237 Tr. : Alright, what we are going to do is. We are going to make sentences as you have been doing with the words. I will do it. The pen is under my table. Eh, the pen is under the this thing. We are going to make sentences, put them on the paper. We are going to write. You are going to write it. Example [Writes on the board]
- 238 Chn.: [Talking together].
- 239 Tr. : The pen is under the table. Say the word under. The pen is under the table. Yes who can make another sentence. Yes mine is a pen. **Don't use the pen. εfa pen no εba. Ka wodeε.** The pen is under the table. Yes Serwah
- 240 Serwah: The book is under the table.
- 241 Tr. : The book is under the table. The book . So here you write the book.
- 242 Chn.: [Talking together].
- 243 Tr. : Under the table. Yes, under. Yankyera.
- 244 Yankyera: The chalk is under the table.
- 245 Tr. : The chalk is under the table. Chalk. Yes Dodoo Kwame.
- 246 Dodoo.: The ball is under the table
- 247 Tr. : The ball, the ball [Writes on the board] The ball is under the table. Ball last one. Amos, Amos.
- 248 Amos.: The pencil is under the table.
- 249 Tr. : The pencil is under the table. The pencil. This week you understand the word under. This week you know the word under. He is under the table. Under the table. Under. Behind, behind, behind. I am standing behind
- 250 Tr+Chn.: The table
- 251 Tr. : I am standing behind the table. I am standing behind the blackboard. I am standing behind the wall. Boateng Collins come up. Boateng Isaac. Yes. Behind come. Yes Angelina behind
- 252 Angelina: I am standing behind the chair.
- 253 Tr. : Again.
- 254 Angelina: I am standing behind the chair
- 255 Tr. : Yeah, you are standing behind the chair. She is behind it. Behind the chair. Amos.
- 256 Amos.: I am standing behind the cupboard.
- 257 Tr. : Again.
- 258 Amos.: I am standing behind the cupboard.
- 259 Tr. : I am standing behind the cupboard. Odame.
- 260 Odame: I have stand behind the chalk.
- 261 Tr. : No you can stand behind the chalk. εnye correct Yes Vivian.
- 262 Vivian: I am standing behind the bad boy.
- 263 Tr. : Again.
- 264 Chn.: I am standing behind the bell boy.
- 265 Tr. : Yes, that's all . Alright that is that. Thank you. There, we are going to write the words. **Fa Ingrishi [English] no bra.** English
- 266 Chn.: **Ya kyekye ama ye.**

- 267 Tr. : Ya kyekye ama mo? Ka wo ho ye wei ntem. Obia ntwere
no ntem.
- 268 Chn.: [Talking together].
- 269 Chd : ebi ne yei?
- 270 Tr.. : [Distributes children's books]. Tenase. Tell her you won't do
again.

APPENDIX 5 (38) TJ: Science

LESSON : THIRTY EIGHT
 SCHOOL : WA PARA-MILITARY PRIMARY
 CLASS : P3
 SUBJECT : ELEMENTARY SCIENCE
 TOPIC : KINDS OF ANIMALS
 TEACHER : " TJ "
 DATE : 28TH MARCH, 1996

- 1 Tr. : Look at the board. Read this one. Yes.
- 2 Chn. : Erementary science.
- 3 Tr. : Not ermentary but elementary science
- 4 Chn. : Elemen.. tary science.
- 5 Tr. : Again.
- 6 Chn. : Elementary science.
- 7 Tr. : Under the elementary science we have what? Yes.
- 8 Chd. : Animal.
- 9 Tr. : Animal. Yes say it.
- 10 Chn. : Animal
- 11 Tr. : Animal
- 12 Chn. : Animal
- 13 Tr. : Very good. Sit down. Right. Now on the book with you open at page 5, page 5. page 5, page 5.
- 14 Chn. : Open to page 5.
- 15 Tr. : Page 5. Olivia don't be silly. Page 5. Animal alright.
- 16 Chn. : [Talking together].
- 17 Tr. : Under the heading we have animals. Then we are going to kinds of animals or classes, kinds
- 18 Chn. : [Talking together].
- 19 Tr. : We have kinds or classes of animals. Classes. Kinds, classes of animals. Ye ka kinds a
- 20 Chn. : [Talking together].
- 21 Tr. : Kinds anaa classes. Hwe nfon no. Page 5
- 22 Chn. : [Talking together].
- 23 Tr. : Ye bebub emmoa noa ew mu no din. Wo tumi b no borfo wo tumi b no Twi. emmoa no, yeb din.
- 24 Chn. : [Talking together].
- 25 Tr. : Yes Vivian Boateng b bi din.
- 26 Vivian. : Bird, bird.
- 27 Tr. : Boateng Vivian!
- 28 Vivian. : Bird!
- 29 Tr. : Bird, bird ,bird eye aboa ben? Bird. Yes Abrafi
- 30 Abrafi. : Annoma.
- 31 Tr. : Birds, b bi din.
- 32 Chn. : [Talking together].
- 33 Tr. : Bird, annoma. Yankyera Akosua.

- 34 Akosua.: Odwan.
- 35 Tr. : Odwan, odwan. Yaa ne borɔfo mu ye ka no sen? Odwan ne borɔfo ye ka no sen?
- 36 Chd. : Abirekyie
- 37 Tr. : Odwan ne borɔfo ye ka no sen?
- 38 Chn. : Sheep.
- 39 Tr. : Sheep, sheep.
- 40 Chn. : [Talking together].
- 41 Tr. : Hwe mu o! Hwe nfonɔ no mu. Yes Bawuah George.
- 42 George.: Monkey.
- 43 Tr. : Monkey, monkey, monkey. Yes Akoto Hanna. eden na wo hunu wo mu?
- 44 Hanna. : Snake.
- 45 Tr. : Snake, snake, snake, snake. Yes hwe mu bio Dapaah Doris.
- 46 Chn. : Lizard.
- 47 Tr. : Lizard. Lizard. Lizard.
- 48 Chn. : [Talking together].
- 49 Tr. : Saa emmoa yi a ya bɔ din no, esese wo hunu ne Twi. Se mo nim?
- 50 Chn. : Yes sir.
- 51 Tr. : Lizard, ensaa ye. Rebecca
- 52 Rebecca: Enephant.
- 53 Chd. : Elephant.
- 54 Rebecca: Elephant.
- 55 Tr. : Elephant, elephant, elephant, elephant, elephant. Yes ensaa ye. Emilia.
- 56 Emilia. : Torkey
- 57 Tr. : Turkey, turkey, turkey, turkey. Asa?
- 58 Chn. : No sir.
- 59 Tr. : Very good. Yes, your name?
- 60 Chn. : Rita Gyimah
- 61 Tr. : Rita Gyimah, Yes.
- 62 Chn. : Snail.
- 63 Tr. : Snail, snail, snail, snail. Yes snail. There is snail there. Ziraffe, ziraffe, ziraffe, ziraffe, the ziraffe. Pig, pig and the rest. Is alright. These are the look on the board. These are the animals so far in the book. But you, more animals. We crow, crow, starling. We have blue bird, we have donkey. We have hippopotamus. We have antelope. We have rat. In our home we have a cat. We have a dog. We have a hen or cock. These are animals in the house. All these animals. They are found in the forest. Saa emmoa yi nyinaa ye hunu bi wiram. Yehunu bi fie. Afei ye bɔ mmoa, yebe bɔ mmoa wɔm wɔ ye fie. efie yehunu wɔm fie bi din. Felicia ka wo ho bɔ baako din. Felicia, Felicia! emmoa yehunu wɔm fie.
- 64 Chn. : Akokɔ.
- 65 Tr. : Akokɔ. Wɔ se Akokɔ yehunu fie. Ampa. Yehunu fie. ee, Atta, bɔ emmoa yehunu nono fie no bi din.

- 66 Chn. : ɔkraman
- 67 Tr. : ɔkraman, ɔkraman, ɔkraman. Mese wo ma wo nsa soa, na wo him mea me nfre wo. Wo an hwe me kora na me pe a mbe fre wo. Agatha Mhum.
- 68 Agatha.: ɔkra.
- 69 Tr. : ɔkra. Obi nhwe me, mbe fre no. ɔkra. Ruth. emmoa yehunu wɔm wɔ fie.
- 70 Ruth. : Odwan
- 71 Tr. : Odwan, Odwan
- 72 Chn. : Sir
- 73 Tr. : emmoa yehunu wɔmfie. Saa emmoa ye hunu wɔm ewɔ fie. Afei yehwe ye. emmoa wɔm ne... Wɔm ne emmoa. **These are the animals.** Yehunu wɔm mo. Afei emmoa yi yebe hwe sɛdɛɛ wɔm se tɛɛ. ebi wɔhɔ a na wɔwɔ ntakra ebi wɔhɔ a nhwi. ebi wɔhɔ a, na wɔwɔ hunam. Ye behwe emmoa wɔm wɔ enhwi, enhwi, enhwi.
- 74 Chn. : [Talking together].
- 75 Tr. : **Fur animal family.** Wɔm a, emmoa enhwi na ewɔ wɔm ho. /Fur f-u-r/. **Fur animal family.** Ye behwe emmoa wɔm wɔ enhwi. enipa wɔ nhwi, odwan wɔ nhwi. Nipa nhwi no deɛ ye ka no hair. Aboa nhwi ye ka no fur. eye Afram, emmoa ewɔ nhwi no bi ne deɛ ewɔ he?
- 76 Afram. : ɔkra.
- 77 Tr. : ɔkra, cat, cat, ɔkra cat. Ramatu.
- 78 Ramatu.: **Monkey.**
- 79 Tr. : **Monkey, monkey, monkey..** Osei Kojo Prince
- 80 Osei. : **Cow**
- 81 Tr. : **Cow.** Yaw Opoku obi fre wo. **Cow.** Yankyera.
- 82 Yankyera: ɔkraman.
- 83 Tr. : ɔkraman. Ye ka ne borɔfo sɛn?
- 84 Chn. : **Dog**
- 85 Tr. : **Dog, dog.** Nboa no bi hyehye nwiram. Yen kɔ nwiram so. Yen kɔ emmoa ewɔ wiram no a ewɔ nhwi. emmoa ewɔ wiram no bi. **Yes Serwah Bonsu, emmoa ewɔ wiram no.**
- 86 Chn. : **Sir, sir**
- 87 Serwah.: **Adowa.**
- 88 Tr. : **Adowa, Adowa, Adowa. Antelope. Yes** emmoa ewɔ wiram no.
- 89 Chd. : **Kusie**
- 90 Tr. : **Kusie** ye ka ne borɔfo sɛn? **Kusie** yefre no sɛn? **Rat** mo nyinaa.
- 91 Chn. : **Rat**
- 92 Tr. : **Rat**
- 93 Chn. : **Rat**
- 94 Tr. : **Again**
- 95 Chn. : **Rat**
- 96 Tr. : **Rat**

- 97 Chn. : **Rat**
- 98 Tr. : Aboa bi te se kusie wɔwɔ nhwi. Aboa bi te se kusie wɔwɔ nhwi. Aboa bi wɔ di sɛn? Rebecca.
- 99 Rebecca: Amokua.
- 100 Tr. : Amokua. Squirrel. squirrel. squirrel Amokua. ɛnye wɔ no nko.
- 101 Chn. : **Sir, sir.**
- 102 Chd. : **Opuro.**
- 103 Tr. : **Opuro nyinaa family. Squirrel. Adowa, kɔtɔ. ɛnno akyire.**
Afei yeɔba ɛmmao wɔm wɔ ntakra. **Feather animals**
- 104 Chn. : [Talking together].
- 105 Tr. : ɛmmao ye wɔ ntakra. ɛmmao ye wɔ ntakra. **Yes Yankyera**
- 106 Yankyera: Akokɔ.
- 107 Tr. : Akokɔ, akokɔ, **hen. Dapaah.**
- 108 Dapaah. : **Kwakwadeɛbi.**
- 109 Tr. : Kwakwadeɛbi, **crow, crow, crow, crow. Yes Abrafi.**
- 110 Chn. : Dabodabo.
- 111 Tr. : Dabodabo, **duck, duck, starling, aseserewa**
- 112 Chd. : Ntomtom.
- 113 Tr. : **Obi se ntomtom, Ntomtom wɔ ntakra?**
- 114 Chn. : **No sir.**
- 115 Chd. : **Yes sir.**
- 116 Chn. : [Laughing].
- 117 Chd. : ɛnne yie.
- 118 Tr. : Ntomtom deɛ no ye ntakra anaa ataban?
- 119 Chn. : Ataban
- 120 Tr. : ɛnno ɛnye ntakra. **Hen crow, crow, duck, duck, stallion, sparrow.**
- 121 Chd. : **Ako.**
- 122 Tr. : **Ako.**
- 123 Chn. : **Parrot.**
- 124 Tr. : **Parrot.**
- 125 Chn. : [Talking together].
- 126 Tr. : **Bluebird**
- 127 Chn. : [Talking together].
- 128 Tr. : Afei yekɔ ɛmmao wɔm deɛ no ɛnye nhwi, ɛnye ntakra na ɛmo ɛye dɛn?
- 129 Chn. : ɛhono
- 130 Tr. : ɛhono, **scale, scale**
- 131 Chd. : **Snake.**
- 132 Tr. : **Obi se snake. Mo. Scales, Yes Yankyera.**
- 133 Yankyera: ɛnwa
- 134 Tr. : ɛnwa, **snail**
- 135 Chn. : [Talking together].
- 136 Tr. : Akoto.
- 137 Akoto. : Akyekyedeɛ.
- 138 Tr. : Akyekyedeɛ. **Tortoise. Rebecca**

- 139 Rebecca: **Giraffe**
- 140 Tr. : **Gyimah**
- 141 Gyimah.: **Kotere.**
- 142 Tr. : **Kotere, lizard, lizard, lizard.** Yaw Eric bra. Yaw Eric wo nka bi.
- 143 Eric. : **ɔwɔ**
- 144 Tr. : **ɔwɔ.** Mhum, eyɛ fa enno to hɔ. Afei na meba. Afei na yɛbɛ sua adeɛ no paa. Ya hunu saa nneɛma yi. emmoa wɔm wɔ nhwi, emmoa wɔm wɔ ntakra, emmoa wɔm wɔ hono. Wei ne saa emmoa ye. Wei yɛ **practice.** Afei na yɛ bɛkɔ ɛdɛn, sɛdɛ wɔm si nantɛ. Saa emmoa, ɛbi nante, ɛbi so yɛdɛn?
- 145 Chn. : ɛbi wiawia.
- 146 Tr. : ɛbi wia, ɛbi yɛdɛn?
- 147 Chn. : ɛbi hurihuri.
- 148 Tr. : ɛbi so hurihuri. ɛmo. Yɛ hurihuri. Afei mebɔ sɛ aboa bɛn na ɛhuri na wo ama wo nsa so. Aboa bɛn na wɔ hurie? Na wo ama wo nsa so. eyɛ.
- 149 Chn. : [Talking together].
- 150 Tr. : emmoa eyɛ a wɔm nante ana sɛ wɔ hurihuri yɛ. Dodoo Kwame, Dodoo Kwame.
- 151 Dodoo.: Odwan
- 152 Tr. : Odwan, odwan ɔhurihuri anaa sɛ wɔ nante? Odwan, **goat.** Vivian aboa bɛn enna wɔm wia ana sɛ ɔhurie?
- 153 Vivian. : Aponkyerene.
- 154 Tr. : Aponkyerene wɔ tumi huri, **enne frog.** Aboa kɛsɛɛ a wɔ tumi huri ana sɛ wɔ tumi nantɛ.
- 155 Chd. : Nantwie.
- 156 Tr. : Nantwie, cow, cow, cow. Rebecca.
- 157 Rebecca: ɔsono.
- 158 Tr. : ɔsono. **Elephant.** Hɛ mo nsore hɔ. Mo nkɔ. Mo nsore nfiri hɔ.
- 159 Chn. : [Talking together]
- 160 Tr. : **Elephant. Yes Felicia.**
- 161 Chn. : Nwa.
- 162 Tr. : Yes
- 163 Chn. : ɔtwe.
- 164 Tr. : ɔtwe, antelope, antelope
- 165 Chn. : Sir, sir, sir.
- 166 Tr. : enna saa emmoa bɛbɛrɛɛ ka ho. Yɛdɛ bɛ si ha. ɛnye enno nko na yɛbɛ yɛ.
- 167 Chn. : [Talking together].
- 168 Tr. : **Crawling.** Wɔm a yɛ wia, yɛ wia. **Crawling animal.** emmoa so a yɛ wia. Yeboah.
- 169 Yeboah.: ɛnwa.

- 170 Tr. : enwa, enwa wɔ wia anaa sɛ wɔ tene? **Snail, tortoise.**
Akyekyedeɛ
- 171 Chn. : **Crab.**
- 172 Tr. : **Kankabi, kankabi, millipede.**
- 173 Chn. : **[Talking together].**
- 174 Chd. : **Nyanyankyere.**
- 175 Tr. : **Snake, scorpion, lizard.**
- 176 Chd. : **Centipede.**
- 177 Chd. : **Gyae kasa.**
- 178 Tr. : **Centipede. Mo, sakasaka.**
- 179 Chn. : **Gyae kasa.**
- 180 Tr. : **Crab..**
- 181 Chn. : **[Talking together].**
- 182 Tr. : **Dodoo. emmoa ye wiawia no. Dodoo ebi ne deɛ ɛwɔ he?**
- 183 Dodoo.: **ɔwɔ**
- 184 Tr. : **ɔwɔ. Ramatu emmoa ye wiawia no ebi ne deɛ ɛwɔ he?**
- 185 Ramatu.: **Sonsono.**
- 186 Tr. : **Sonsono, earthworm, earthworm. Afei ye nhwe. emmoa wɔm tuo. Flying animal. Ye tuo. Boateng Vivian.**
- 187 Vivian. : **Bird.**
- 188 Tr. : **Bird. bird, bird. Akoto. Yes.**
- 189 Akoto. : **Dabodabo.**
- 190 Tr. : **Dabodabo, duck Dabodabo wɔ tu? Duck. Rebecca bɛ ka bi ma yen tie. Ka woho. Rebecca.**
- 191 Rebecca: **Akokɔ**
- 192 Tr. : **Akokɔ, cock wɔ nso wɔ tu pa, pa, pa na wɔ kɔ.**
- 193 Chn. : **[Talking together].**
- 194 Tr. : **Okyere Darko, Yes Mhum.**
- 195 Chn. : **Ka ye. Ka.**
- 196 Tr. : **Elizabeth.**
- 197 Okyere: **Anka me bɛka.**
- 198 Tr. : **Anokye.**
- 199 Anokye: **Ntomtom.**
- 200 Chn. : **Sir, sir, sir.**
- 201 Tr. : **Yes.**
- 202 Chn. : **Kwakwadebi.**
- 203 Tr. : **Kwakwadebi. Crow, crow, crow.**
- 204 Chn. : **Sir, sir, sir.**
- 205 Tr. : **Obi aka ntomtom. Mate nso me nfa. Mate obi aka ntomtom. Me nfa. Tie, fa wo nsa to hɔ. Obi ka ntomtom, me nfa. Ntomtom no wɔ tu nso wɔ ye den?**
- 206 Chn. : **Wɔ ka.**
- 207 Tr. : **Seesei eden ho asem na ye ka ye?**
- 208 Chn. : **emmoa wɔm we ntakra.**
- 209 Tr. : **emmoa eho asem na ye ka ye. Ntomtom no wɔ tu nso ye nfa nkaho. efa bi no wɔ ye aboa. Ye wɔ animal kingdom enna ye wɔ insects**

- kingdom. W▷ no w▷ ye aboa ye de no fra insects entaban bo mu. eye. Afei ye be k▷ eboa, swimming, swimming. Asee ne sen?
- 210 Chn. : Wo edware nsuo.
- 211 Tr. : emmoa edware nsuo mu. Swimming animals na ye pe emmoa edware na ye pe. Agatha.
- 212 Agatha.: Duck.
- 213 Tr. : Duck, duck, dabodabo odware duck. Ramatu
- 214 Ramatu.: Animal
- 215 Tr. : Ramatu!
- 216 Ramatu.: Animal
- 217 Tr. : Ramatu, Bonsu.
- 218 Bonsu.: Fish
- 219 Tr. : Fish, fish, fish.
- 220 Chn. : [Talking together].
- 221 Tr. : Fish, Yeboah
- 222 Chn. : Aponkyerene.
- 223 Tr. : Aponkyerene, frog. Mmo. Frog, frog. Yes
- 224 Chd. : Apatre
- 225 Tr. : Apatre, ne nyinaa ye fish. Ye w▷ fish locust. Abrafi.
- 226 Abrafi.: Nsonsono.
- 227 Tr. : Nsonsono.
- 228 Chd. : Nkonkon.
- 229 Tr. : Nkonkon, eye. et▷ mmre bi a ▷w▷ w▷ tumi dware.
- 230 Chn. : [Talking together].
- 231 Tr. : et▷ brebia, crocodile, crocodile
- 232 Chd. : Onini.
- 233 Tr. : Onini, python, python, python. Mmo.
- 234 Chn. : [Talking together].
- 235 Tr. : eye. Afei creeping, creeping, se wo ye den? Creeping asee ne sen? Creeping. Ya wo ye den?
- 236 Chn. : [Inaudible]
- 237 Tr. : Dabi. The child, the child. The little child creeps. The baby is creeping. Baby. Yes.
- 238 Chn. : Nipa w▷ hye yefum.
- 239 Tr. : Dabi. Baby ye den?
- 240 Chn. : Akwadaa.
- 241 Tr. : Akwadaa be ye sen?
- 242 Chn. : Akwadaa ketewaa.
- 243 Tr. : The baby is creeping on the ground. Na ekyere sen?
- 244 Chn. : ▷wawia.
- 245 Tr. : Mmo! Ye pe nboa ye wia, emmoa ye wia. ▷wawia. emmoa no bi ne dee ew▷ he? Abrafi.
- 246 Abrafi.: ▷wia.
- 247 Tr. : ▷wia, ▷wia, ▷wia ne din de ▷wia nanso ▷nwawia. W▷ no dee w▷ tu. Me pe emmoa ye wawia. Yes Agatha.
- 248 Agatha.: enwa.

- 249 Tr. : Nwa, nwa, snail
 250 Chd. : Kɔɔ.
 251 Tr. : Kɔɔ. Crab.
 252 Chn. : [Talking together].
 253 Tr. : Mhum.
 254 Chn. : Tortoise.
 245 Tr. : Tortoise
 256 Chn. : Snake
 257 Tr. : Yes Ramatu.
 258 Chn. : Snake
 259 Tr. : Snake, snake
 260 Chn. : [Talking together].
 261 Tr. : eye, nnema no doɔso. Ye ye no kakrakakra. eye. Yen wiee.
 Dee edikan ya hunu emmoa no . Ya hunu emmoa bia wɔm ewɔ nhwi, wɔm ewɔ ntakra, wɔm ewɔ ehono. Afei yaba emmoa wɔm hurihurie, wɔm a ye nantee, wɔm a wɔm wiawia, wɔm a wɔm tuo, wɔm a wɔm dware. Afei yɛbe kɔ se emmoa no, saa mmoa no ebi wɔhɔ a ye wɔɔ. ebi wɔhɔ a yen ewo. Wo be bɔ bi din akyerɛ me. Animals that lay eggs. Animals that produce young ones. Yɛbe ka nmmoa, emmoa, hwe board no so, wo be hwe manim. Naa wa ka nmmoa yaa, wɔm dee ye wowoɔ a, kwan ben na wɔm faso wowoɔ. ebi ne tese akokɔ. Hwan na enim akokɔ? Mmo, akokɔ. eye. akokɔ wɔ ye den na wa awo?
 262 Chd. : Wɔto kosua.
 263 Tr. : Hee! Mete se wo kasa, mbe pam wo afiri ha. Akokɔ wɔ yeden na wɔ ewoɔ? Yankyera.
 264 Yankyera: Wo ma no nkosua na wa butu so.
 265 Tr. : Akokɔ enti saa. Akokɔ wɔ yeden na wɔ ewoɔ? Ramatu.
 266 Ramatu.: Wɔto
 267 Tr. : eden?
 268 Ramatu.: Wɔto kosua na wa hwane.
 299 Tr. : Wɔto kosua. Mmo. Wɔ to kosua. Na akokɔ no ɔbaa no. wɔbe yeden ansa na wa to kosua? Yes ɔbe yeden ansa na wa to kosua no? Agarthā?
 270 Agarthā.: Mmemaa foro no
 271 Tr. : Bɛmaa be foro no. Bɛmaa be foro no ansa na wa to kosua no. Bɛmaa foro noa, na wa to kosua no. Obi bɛbisa se, master, teacher, bɛmaa foro noa, ebeye den na wa to kosua no? Bɛmaa foro noa ɔwɔ biribi a yɛfre no se sperm, sperm mu nyinaa mo nka.
 272 Chn. : Sperm.
 273 Tr. : Sperm
 274 Chn. : Sperm
 275 Tr. : Saa sperm no, ebe kɔ ɔbaa no ho, ansa na wa nya kosua no. Saa sperm no, ye nipa nso ye wɔ bi. Onipa so wɔ bi. Onipa biara wɔwɔ nkwa wɔ bi. Aboa bia wɔ bi. Saa na wɔm nso eforo ɔbaa, wɔbe ma no

- sperms. Saa sperms no na ebe ye saa nno^oma no. enti akok^o bema be foro
^obaa no na wa nya sperms. Na wa yeden?
- 276 Tr+Chn.: Na wa to kosua.
- 277 Tr.: Wa to kosua. ee, emmoa ye bub^obub^o w^om din yi, mep^e se
 wo b^o emmoa bia, akok^o nkaho, w^om a woto kosua ansa na w^om awo^o.
 emmoa ben na etaa to kosua? Se wo yi akok^o firi h^o a. Yes.
- 278 Chd.: Kotere.
- 279 Tr.: Kotere. Mo mm^o mo nsam ma no
- 280 Chn.: [Clapping].
- 281 Tr.: Kotere to kosua. ee Yeboah Emanuel, aboa ben saa?
- 282 Yeboah.: Aponkyerene.
- 283 Tr.: Aponkyerene. Mo mm^o mo nsam ma no.
- 284 Chn.: [Clapping].
- 285 Tr.: Frog, frog w^o to kosua. ee, w^on wie^e. Me tumi kase me
 mmuae koraa. Me, me k^o. Aboa ben na eto kosua bio? Yes..
- 286 Chn.: Akonfem.
- 287 Tr.: Akonfem. Mo mm^o mo nsam ma no.
- 288 Chn.: [Clapping].
- 289 Tr.: Aboa ben na eto kosua bio? Yes.
- 290 Chn.: Akok^ohwede^e.
- 291 Tr.: Akok^ohwede^e. Mo mm^o mo nsam ma no.
- 292 Chn.: [Clapping].
- 293 Tr.: ebi w^oh^o obi nb^o ye. Aboa bi ne ho w^o hono nso w^oto
 kosua. Ne ho w^o hono. Me npe sir.
- 294 Chd.: Sir.
- 295 Tr.: Emilia aboa ben nea?
- 296 Emilia: Denkyem.
- 297 Tr.: Denkyem. Mmo! Denkyem. Nti
- 298 Chn.: [Talking together].
- 299 Tr.: Aboa, aka aboa baako ehein.
- 300 Chd.: Dabodabo.
- 301 Tr.: Dabodabo, ne nyinaa ye aboa. Aka baako Yes Sefa
- 302 Chn.: ^oprammire.
- 303 Tr.: ^ow^o, snake
- 304 Chn.: [Talking together].
- 305 Tr.: eye saa mmoa yi
- 306 Chn.: [Talking together].
- 307 Tr.: Saa mmoa yi nyinaa to kosua. Na w^o to kosua na aye den?
- 308 Chn.: Na ahwane
- 309 Tr.: Na ahwane, ansa na wa nya mma. enno dee mo ma ye nhwe, ee
- 310 Chn.: [Talking together].
- 311 Tr.: W^om soa, emmoa w^om dee w^om ento kosua nanso w^om
 ewowo. Mo be b^o bi din ma matie. W^om ye nto kosua nanso wo be hwe na
 wa awo. W^on dee w^o nto kosua wo be hwe na wa awo. Ramatu ebi ne dee
 ew^o he?

- 312 Ramatu.: Adanko.
- 313 Tr. : Adanko. Hare, hare.
- 314 Chd. : Rabbit.
- 315 Tr. : Rabbit, rabbit, cat. Yes, adanko. Bawuah.
- 316 Bawuah.: Aduwii.
- 317 Tr. : Aduwii, Osei Bonsu.
- 318 Bonsu. : Fish.
- 319 Tr. : Fish. Bɔ wɔm a ɛwɔ fie bi din. Osei Kojo.
- 320 Chn. : ɔkra.
- 321 Tr. : ɔkra, Emanuel.
- 322 Chn. : ɔkraman.
- 323 Tr. : ɔkraman. Sɛ ɛmmao yi
- 324 Chn. : [Talking together].
- 325 Tr. : Cat, cow, saa mmoa, saa mmoa yi, tie ha. Saa mmoa yi kwan ben so na wɔm fa so ɛwowɔ? Wo nim a ma wo nsa so. Saa mmoa yi wonim a pagya wo nsam. Adanko, ɔkra, ɔkraman, ɛɛ. yɛ ka asem a tie. ɔkra, kusie, mo ntie, saa mmoa yɛ wɔm yɛ dɛn na wɔm ɛwowɔ?
- 326 Chn. : Sir, sir, teacher, sir.
- 327 Tr. : Yes, bɛ ka kyerɛ me. Wɔm yɛ dɛn na wɔm ɛwowɔ?
- 328 Chn. : Bɛmaa foro wɔm.
- 329 Tr. : Bɛmaa foro wɔm. Wɔm bɛmaa no ɛforo no, na wa awoɔ? Na me bisa mo sɛ ɛnti, ɛɛ ɔkraman, sɛ wa hunu ɔkraman da?
- 330 Chn. : Yes sir.
- 331 Tr. : ɔkraman baa, sɛ nantwie foro noa wɔ bɛ ɛwo?
- 332 Chn. : No sir.
- 333 Tr. : Hɛ tie! Hɛ nantwie bɛmaa, nantwie bɛmaa o! ɛnna ɔkraman ɔbaa. Nti nantwie bɛmaa no foro ɔkraman ɔbaa noa wɔ ne ɛwo?
- 334 Chn. : Wɔ ne ɛwo/wɔbɛ ɛwo [simultaneous production]
- 335 Tr. : Tie no yiye o!
- 336 Chn. : Wɔ ne ɛwo/wɔbɛ ɛwo Wɔ ne ɛwo/wɔbɛ ɛwo.
- 337 Int. : Obi frɛ wo.
- 338 InT. : ɛnne hwan?
- 339 Int. : Me papa
- 340 InT. : Wo dɛɛ kɔ
- 341 Tr. : Tie, sɛ bɛmaa foro noa, wɔ bɛ ɛwo anaa sɛ wɔ ne ɛwo?
- 342 Chn. : Wɔbɛ ɛwo/Wɔ ne ɛwo.
- 343 Tr. : ɛbi sɛ wɔbɛ ɛwo. Emilia adɛn nti na wɔ ne ɛwoɔ?
- 344 Emilia. : Nantwie no mu wɔ duru sine ɔkraman no.
- 345 Tr. : Nantwie no mu wɔ duru sine ɔkraman no. ɛyɛ.
- 346 Chn. : Wɔbɛ ɛwo/Wɔ ne ɛwo.
- 347 Tr. : Yeboah adɛn nti na wɔ ne ɛwoɔ?
- 348 Yeboah. : Ne mu wɔ duru sine ɔkraman no.
- 349 Tr. : ɛnye ɛnno na wa kano?
- 350 Chn. : Sir, sir, sir. Wɔbɛ ɛwo/Wɔ ne ɛwo.
- 351 Tr. : Adɛn nti na wɔ ne ɛwoɔ?

- 352 Chd. : W▷ foro noa w▷ be wuo
- 353 Tr. : Hee ka nyansa sem ma yen tie. ebe ye deen nti na w▷ ne ewo▷?
- 354 Chn. : [Talking together].
- 355 Tr. : ehein, be ka ma yen tie. Sore bra be ka kyere me. Sore. Mhum.
- 356 Chd. : enye ne ho aboa bi nono.
- 357 Tr. : Mmo! enye ne family nono. Tenase. W▷ ne nono efiri abusia baako.
- 358 Chn. : [Talking together].
- 359 Tr. : W▷ ne nono nyinaa efiri abusia baako, enno nti w▷ ne ewo.
- 360 Chn. : enye ne ho nipa bi nono
- 361 Tr. : enye aboa nono. enno nti nantwie entumi enk▷ foro ▷kraman. Na ▷kraman▷kraman etumi ek▷ foro kotere, esese, kotere yeden? eforo kotere, nantwie eforo nantwie, odwan eforo odwan, ▷kraman eforo ▷kraman ansa na wa ye den?
- 362 Tr+Chn.: Wa awo.
- 363 Chn. : [Talking together].
- 364 Tr. : Mmo, afei mo ahunu sedee w▷m se tee no.
- 365 Chn. : Yes sir.
- 366 Tr. : Afei dee etwa to▷ na ye k▷ yi o! Dee etwa to▷. Ye wiee a na asa. Food eye den?
- 367 Chn. : Fufuo.
- 368 Tr. : Eei!
- 369 Chn. : [Talking together].
- 370 Tr. : Aduane a saa emmoa yi yedie. Yede be fiti ha. Aduane a ▷kraman edie. B▷ ma me ntie. ▷kraman.
- 371 Yeboah.: Abete.
- 372 Tr. : Abete. mo mm▷ mo nsam ema no
- 373 Chn. : [Clapping].
- 374 Tr. : Boakye Eric. ▷kra aduane a w▷ die. Ka woho.
- 375 Eric. : Fufuo.
- 376 Chn. : [Talking together]
- 377 Tr. : Hee! W▷ di fufuo. W▷ di fufuo. Odwan, Osei Bonsu. Odwan eden na wodie?
- 378 Bonsu : ▷wi bankye hono
- 379 Tr. : ▷wi bankye hono. Nantwie, Akoto. eduane a wodie.

APPENDIX**5 (39)TK: English**

LESSON : THIRTY-NINE
SCHOOL : WA PARA-MILITARY PRIMARY
CLASS : P4
TEACHER : " TK "
SUBJECT : ENGLISH LANGUAGE (READING COMPREHENSION)
TOPIC : MAAME ASABEA'S STALL
DATE : 15TH MARCH, 1996

- 1 Tr. : We are going to read Maame Asabea's Stall. All of you.
2 Chn.: Maame Asabea's Stall
3 Tr. : Again.
4 Chn.: Maame Asabea's Stall
5 Tr. : Well these are the words in the passage. These are the words in the passage. I have written it on the board. Now we are going to read it. If you can, put up your hand and I will call you. Do you understand?
6 Chn.: Yes Madam.
7 Tr. : Okay. Well, who can tell me the first word? Yes Daniel.
8 Daniel: Maame
9 Tr. : All of you.
10 Chn.: Maame
11 Tr. : Again.
12 Chn.: Maame
13 Tr. : This one. Mary.
14 Mary: Daughter
15 Tr. : Again.
16 Mary: Daughter
17 Tr. : Daughter. All of you.
18 Chn.: Daughter.
19 Tr. : Again.
20 Chn.: Daughter.
21 Tr. : This one Ernestina.
22 Ernestina: Buy.
23 Tr. : Speak louder.
24 Ernestina: Buy.
25 Tr. : Again.
26 Ernestina: Buy
27 Tr. : All of you.
28 Chn.: Buy.
29 Tr. : Again.
30 Chn.: Buy.
31 Tr. : This one. Gloria.
32 Gloria: Plantain
33 Tr. : If you speak , speak louder, hein?
34 Gloria: Plantain
35 Tr. : Plantain, all of you.

- 36 Chn.: Plantain
- 37 Tr. : Again.
- 38 Chn.: Plantain
- 39 Tr. : This one
- 40 Chn.: Fingers.
- 41 Tr. : All of you.
- 42 Chn.: Fingers.
- 43 Tr. : Again
- 44 Chn.: Fingers.
- 45 Tr. : This one Florence.
- 46 Florence: Fish
- 47 Tr. : Fish, all of you.
- 48 Chn.: Fish.
- 49 Tr. : Again.
- 50 Chn.: Fish.
- 51 Tr. : This one Mary.
- 52 Mary: There.
- 53 Tr. : Again.
- 54 Mary: There.
- 55 Tr. : All of you.
- 56 Chn.: There.
- 57 Tr. : This one, yes.
- 58 Chn.: Bottle.
- 59 Tr. : This one. Naomi.
- 60 Naomi: Cooking oil.
- 61 Tr. : All of you
- 62 Chn.: Cooking oil.
- 63 Tr. : Again.
- 64 Chn.: Cooking oil.
- 65 Tr. : And the last word. Naomi.
- 66 Naomi: Chalk.
- 67 Tr. : No
- 68 Chn.: Madam, madam, madam.
- 69 Tr. : Yes Abena.
- 70 Abena: Salt.
- 71 Tr. : Again.
- 72 Abena: Salt.
- 73 Tr. : Salt, all of you.
- 74 Chn.: Salt.
- 75 Tr. : Again.
- 76 Chn.: Salt.
- 77 Tr. : Now when you say morning what are you doing? Morning, if somebody greets you in the morning what are you to do? Don't say madam, madam. If you can say it put up your hand so that I will call you.
Yes Kantinka.
- 78 Kantinka: ⇨kyea.

- 79 Tr. : Nipa kor▷ no ▷kyea ana se anεpa, εh, an▷pa daughter, daughter. Yes, Catherine.
- 80 Catherine: [No response]
- 81 Tr. : You, daughter. Atta.
- 82 Chn.: Awia.
- 83 Tr. : No.
- 84 Chn.: Oh!
- 85 Tr. : Daughter. Yes if you can put up your hand. Yes Agyeman.
- 86 Agyeman: ▷baa.
- 87 Tr. : ▷baa.. No. If your parents give a birth to εh, a female.
- 88 Chn.: Yes madam.
- 89 Tr. : Then she is her daughter. Wo Maame ne ba baa. Buy, buy. I am going to buy a pen. Now what does buy mean? Ernestina.
- 90 Ernestina: T▷.
- 91 Tr. : T▷, aye se wo t▷ biribi. Plantain, plantain. Yes Florence.
- 92 Chn.: Bor▷dee
- 93 Tr. : Bor▷dee. Fingers. Yes three fingers of plantain. Yes Odame.
- 94 Odame: Nsa.
- 95 Tr. : No three fingers of plantain. We are doing it. εh. We are looking at it in the book. Yes.
- 96 Chd.: Nsa.
- 97 Tr. : No, Daniel.
- 98 Daniel: Nsa..
- 99 Tr. : No, we have three fingers of plantain, εh, four fingers of plantain, ten fingers of plantain. What does the fingers stand for? Atta Agyeman.
- 100 Agyeman: Ten
- 101 Tr. : No
- 102 Chn.: Nineteen
- 103 Tr. : No, if you want to buy plantain, you may see that they have group them according to εh, fingers, hein? You have three fingers, four fingers. May be what? ten, εdu, or fifty cedis. Nbor▷dee nbaako, baako a εda so no hε!
- 104 Chn.: Yes madam.
- 105 Tr. : Fish, fish, yes
- 106 Chn.: εnam
- 107 Tr. : No, if you speak, speak louder. Mavies.
- 108 Chn.: Adwene.
- 109 Tr. : Fresh, fresh. These tomatoes are fresh. What does that mean? Abena.
- 110 Abena.: Adeε a εye fε.
- 111 Tr. : Adeε a εye fε. Bottle, bottle. Yes Asamoah.
- 112 Asamoah: εtoa
- 113 Tr. : εtoa cooking oil, cooking oil. Adu Hanna.
- 114 Hanna: εngo

- 115 Tr. : Okay we use it for cooking. Is a type of oil for cooking. But we use palm oil too. Then what about salt? Theresa
- 116 Theresa: enkyene
- 117 Tr. : Now we are going to read from the passage. Some body should read Fosua and another person should read em, Maame Asabea. So I want two people who are going to read this. Odame you are going to read Fosua and Atta Agyeman Maame Asabea. When you reach a certain place I will call another person to read. So you start.
- 118 Odame: Fosua. Good morning
- 119 Tr. : Speak louder
- 120 Odame.: Fosua. Good morning Maame Asabea.
- 121 Atta: Maame Asabea. Good morning my daughter. Can I
- 122 Tr. : Can I help you
- 123 Atta: Can I help you
- 124 Tr. : Fosua
- 125 Odame: Fosua. Good morning Maame Asabea.
- 126 Tr. : No, continue.
- 127 Odame: Fosua. Good morn
- 128 Tr. : No, continue. We have finished that place. Continue from here. We are continuing
- 129 Odame: Fosua. Yes I want to buy some plantain
- 130 Atta.: Maame Asabea. How many do you come to buy?
- 131 Tr. : The word is want
- 132 Atta: Maame Asabea. How many do you, you want to buy?
- 133 Tr. : Maame Asabea. How many do you want to buy? Okay, Fosua.
- 134 Odame: Fosua. But how many are these please?
- 135 Tr. : Read it again.
- 136 Odame: Fosua. But how many are these please?
- 137 Tr. : How much are they?
- 138 Odame: How much are they please?
- 139 Tr. : Maame Asabea.
- 140 Atta: Maame Asabea. Three fingers for forty cedis.
- 141 Odame: Fosua. They are very dear Mama.
- 142 Tr. : They are very dear Maame. Yes Fosua.
- 143 Atta: Maame Asabea. My plantains are big and fresh. Go round the village you will see that my plantains are not dear. They are cheap.
- 144 Tr. : Okay, Fosua.
- 145 Odame: Fosua. I'm buy ten
- 146 Tr. : I'm
- 147 Odame: I'm buy eight. Can I take
- 148 Tr. : If you read, I say that if you read and there is full stop you must stop and rest before you continue.
- 149 Odame: Fosua. I'm buy eight. Can I play ten cedis for one fingers please?
- 150 Tr. : Say one finger, one finger. Okay. We are going to continue. All that place. Okay. Daniel.. You must speak louder. Read

- 151 Tr. : Fosua I 'll. eight finger. Can I pray, pray ten cedis my one, for one finger please?
- 152 Atta.: Maame Asabea. I am afraid not.
- 153 Tr. : Read that again.
- 154 Atta.: Maame Asabea I' afraid not
- 155 Tr. : Fosua.
- 156 Daniel: Fosua. We buy them
- 157 Tr. : Well
- 158 Daniel.: We well buy, buy.
- 159 Tr. : Well
- 160 Daniel: Fosua, well and we buy
- 161 Tr. : Well who can read better? Yes
- 162 Chd.: We shall buy.
- 163 Tr. : Fosua.
- 164 Chd.: Fosua well buy, well buy you.
- 165 Tr. : Mabel.
- 166 Mabel: Fosua. We'll buy them
- 167 Tr. : Fosua. Well I'll buy them, well I'll buy them Maame Asabea.
- 168 Atta.: Maame Asabea there you. There you are. Seven fingers for eighty cedis. You see, you see I have.
- 169 Tr. : Continue
- 170 Atta.: Sir
- 171 Tr. : Added.
- 172 Atta.: You see I've added one finger
- 173 Tr. : Fosua
- 174 Chn.: Fosua. Thank you Maame. Here a
- 175 Atta.: Maame Asabea. Thank you my daughter. Do you want
- 176 Tr. : Anything.
- 177 Atta.: Anything.
- 178 Tr. : Do you want anything else?
- 179 Atta.: Do you, do you want anything else?
- 180 Tr. : Okay, turn to page 33. Now I hope you are all following the passage. Okay, when we finish we are going to continue it in Twi so that you all understand. Do you understand?
- 181 Chn.: Yes madam.
- 182 Chn.: Okay, Fosua.
- 183 Chd.: Fosua, Osei Agyeman
- 184 Osei.: Fosua
- 185 Tr. : If you read take your time
- 186 Osei.: Fosua. yes I want some salt and a bottle of cooking oil. How much. How much is eh a kilo of salt?
- 187 Tr. : Maame Asabea.
- 188 Chd.: Ten cedis.
- 189 Osei.: And the oil?
- 190 Chd.: Maame Asabea. One hundred and.
- 191 Tr. : Read.
- 192 Chd.: Maame Asabea. One hundred and this.

- 193 Tr. : Thirty cedis.
- 194 Chd.: Thirty, thirty cedis a bottle.
- 195 Osei: Fosua. I am, I'm em. I'm afraid this is dear. Last, last eh.
- 196 Tr. : I'm afraid this is dear.
- 197 Osei: I'm afraid this is dear.
- 198 Tr. : Last week.
- 199 Osei: Last week I bottle.
- 200 Tr. : I bought.
- 201 Osei: I bottle.
- 202 Tr. : I bought.
- 203 Osei: One bottle of one hundred and thirty cedis.
- 204 Chd.: Maame Asabea. This can be
- 205 Tr. : This can't be true
- 206 Chd.: This can't be true my daughter. Mine is
- 207 Tr. : Rather
- 208 Chd.: Rather cheap and this is very good too.
- 209 Osei: Fosua. Well, well buy it.
- 210 Tr. : Read that again.
- 211 Osei: Fosua. Well.
- 212 Tr. : Well I'll buy it.
- 213 Tr. : Well I'll buy it. I need.
- 214 Tr.: Must.
- 215 Osei: I must give you one hundred and forty cedis, fifty cedis for this oil and ten cedis of the salt.
- 216 Tr. : For the salt.
- 217 Osei: For the salt.
- 218 Tr. : That
- 219 Osei: : That is one hundred and fifty cedis. There you are.
- 220 Tr. : Here
- 221 Osei: There you are.
- 222 Tr. : Here.
- 223 Osei: There you are.
- 224 Tr. : Here you are. Wo si den? Wa gyimi dodo.
- 225 Chd : Thank you very much my daughter
- 226 Osei: Fosua. There not
- 227 Tr. : Not
- 228 Osei: Not at all
- 229 Chd.: Thank you da, Thank you bye
- 230 Tr. : Goodbye
- 231 Osei: Thank you and goodbye
- 232 Tr. : Thank you
- 233 Chd : Goodbye
- 234 Tr. : Afei read it. Fosua last sentence
- 235 Chd : Fosua. Not at all. Goodbye Not at all. Goodbye
- 236 Tr. : Now let's all turn to page 32. Turn to page 32. Okay, we have finished the passage. We are going to continue in Twi so that you all understand it. Now let's all turn to page 32. Turn to page 32. What Fosua

read, hwan na εβε tumi ade akɔ Twi ama ye? Deε Fosua dikan kan ye no. Good morning Maame Asabea. Mhum. Yes mmo nye dii na yeɛtie aseɛm

- 237 Chd.: Maame Asabea, Makye.
 238 Tr. : Maame Asabea Good morning my daughter. Can I help you?
 Hwan na εkyere aseε akɔ Twi? Yes.
 239 Chd.: Maame Asabea, makye oo!
 240 Tr. : Yes obi hwan?
 241 Chd.: Maame Asabea, makye oo! Maame Asabea, makye oo!
 Maame Asabea, makye oo! Me dɔ, εye, me ba baa. Wotɔ den?
 242 Tr. : Can I help you? Kofi Osei.
 243 Kofi.: Yes
 244 Tr. : Yeεka Twi
 245 Kofi.: Twi?
 246 Chd.: Maame Asabea. Makye me ba baa, mbe tumi aboa wo?
 247 Chd.: Fosua. Yes I want to buy some plantain.
 248 Chd.: Annie, makye, mepε se me tɔ borɔdes.
 249 Chd.: Maame Asabea. How many do you want to buy?
 250 Chd.: Maame Asabea wo se wotɔ sɛn?
 251 Tr. : Maame Asabea. How many do you want to buy?
 252 Chd.: Maame Asabea wo se wotɔ sɛn?
 253 2Chd.: Fosua. But how much are they please?
 254 Tr. : Mmo te hɔ mo nka bi. Aden? Yeε ka a mo nte aseε? Hein?
 255 Chd.: εye sɛn, sɛn me pa kyeεw?
 256 Tr. : Maame Asabea. Three fingers for forty cedis. Three fingers for forty cedis
 257 Chd.: Wɔse ne boa ye cedi tɔha
 258 Chd.: Wɔse ne boa ye forty cedi.
 259 Tr. : Speak louder.
 260 Chd.: Wɔse ne boa ye forty cedi.
 261 Tr. : Forty cedis ye ka ne Twi sɛn?
 262 Chn.: Forty cedis.
 263 Tr. : Yeε ka ne Twi sɛn! English na yeε ka no forty cedis. Wode kɔ
 Twi a yeε ka no sɛn? Yes
 264 Chd.: Cedi εduanan.
 265 Tr. : Okay. Fosua.
 266 2Chd.: They are very dear Maame
 267 Tr. : Beatrice
 268 Beatrice: Maame mpa wo kyew mbe tumi atɔ bi?
 269 Tr. : Yes[Points to another child].
 270 Chd.: Neboa wɔ den.
 271 Tr. : Speak louder.
 272 Chn.: Neboa wɔ den.
 273 Tr. : Maame Asabea. My plantains are big and fresh. Abigail.
 274 Abigail.: Maame Asabea. Borɔdes no εye fe.
 275 Tr. : [Points to another child].

- 276 Chn.: Wɔse borɔdeɛ no ɛsoso nso ɛyɛ fɛ
 277 Tr. : Go round the village. Go round the village. Go round the village.
 278 Chd.: Wɔse kɔ kyine kurom ha hwɛ
 279 Tr. : You will see that my plantains are not dear. They are cheap.
 This row.
 280 Chd.: Wɔse ne borɔdeɛ no neboa ɛnyɛ den.
 281 Tr. : They are cheap.
 282 Chd.: Wɔse ne borɔdeɛ no ɛnyɛ den.
 283 Tr. : Na mom dɛn?
 284 Chd.: Na mom ne boa wɔ fo.
 285 Tr. : Fosua. I'm buying eight fingers. Can I pay ten cedis for one finger?
 286 Chd.: Wɔse baako bia yɛ ten cedis
 287 Chd.: Wɔse borɔdeɛ no baako ten cedis.
 288 Tr. : Maame Asabea I'm afraid not. Maame Asabea I'm afraid not.
 Yes.
 289 Chd.: Wɔse wɔ suro dabi.
 290 Tr. : Fosua. Well I'll buy them. Well I'll buy them. Hee!
 291 Chd.: Wɔse okay, wɔ bɛ tɔ.
 292 Chn.: Wɔse okay, wɔ bɛ tɔ.
 293 Tr. : Maame Asabea: Here you are. Here you are. Seven fingers for eighty cedis. Yes.
 294 Chd.: ɔse seven bia ɛyɛ eighty cedis.
 295 Chd.: Wɔse sɛn na wɔpɛ
 296 Chd.: Wɔse maame meda wo ase. ɛyɛ aduakron, aduwɔtwe nie.
 297 Chd.: Wɔ ka se me dase, pɔne, aduwɔtwe no nie.
 298 Tr. : Maame Asabea. Thank you my daughter. Do you want anything else? Thank you my daughter. Do you want anything else? He!
 Wo na wo kasa no?
 299 Chd.: Wɔse me da wase sɛ wode ama me.
 300 Tr. : Adeɛ a yɛ kyerɛ aseɛ yɛ nte yɛ. Mmo deɛ mo se mo agyimi. Mmo ase paa. Kwaseasɛm nkoa na nipa te ho. Mefa ho bɛn. Sɛ mmo na yɛde mo kɔ.
 301 Chd.: Wɔse wɔwɔ biribi tɔ bio ana
 302 Tr. : Afei page 33. Fosua. Yes. I want some salt and a bottle of cooking oil. How much is a kilo of salt? Wɔse sɛn? Maame Panin.
 303 Panin.: Wɔse wɔn tɔ biribia bio.
 304 Tr. : Yes. I want some salt and a bottle of cooking oil.
 305 Chd.: Wɔse me tɔ nkyene ɛnne annwa
 306 Chd.: How much is a kilo of salt?
 307 Chd.: Ten cedis.
 308 Chd.: Wɔse nkyene no yɛ ten cedis
 309 Tr. : How much is a kilo of salt?
 310 Chd.: Wɔse nkyene no yɛ sɛn

- 311 Chd.: Maame Asabea. Ten cedis, ten cedis.
- 312 Tr. : Ten cedis ye ka no sen wɔ Twi?
- 313 Chd.: Pɔn ɛnum
- 314 Chd.: Fosua. And the oil ?
- 315 Chd.: Wɔse ngo no so ye?
- 316 Tr. : Maame Asabea. One hundred and fifty cedis a bottle, one hundred and fifty cedis a bottle. One hundred and fifty yebe ka ne Twi sen? Boatemaa.
- 317 Boatemaa: Cedi ɔha aduonum.
- 318 Tr. : I'm afraid this is dear. I'm afraid this is dear
- 319 Chd.: Wɔse weideɛ neboa wɔ den.
- 320 Tr. : Last week I bought a bottle for one hundred and thirty cedis, one hundred and thirty cedis. Last week I bought a bottle for one hundred and thirty cedis. One hundred and thirty no ye beka ne Twi sen?
- 321 Chd.: Cedi ɔha sere, cedi ɔha sere dunum
- 322 Tr. : This can't be true my daughter. My is rather cheap.
- 323 Chd.: Wɔse me ba wobua wei deɛ.
- 324 Tr. : And is very good too.
- 325 Chd.: Wɔse neboa nye den ɛno ɛye soso
- 326 Tr. : Fosua. Well I'll but it. I must give you one hundred and fifty cedis for the oil and ten cedis for the salt
- 327 Chd.: Sir
- 328 Tr. : ɛhein.
- 329 Chd.: Mbe ma wo
- 330 Chd.: Mbe ma wo cedi ɔha aduonum.
- 331 Tr. : And ten cedis for the salt
- 332 Chn.: Mmom nkyene no deɛ mema wo pɔn num.
- 333 Tr. : That is one hundred and fifty cedis. Here you are. enti ye ka ne nyinaa bomu no ne ka kɔ si one hundred and sixty cedis. Afei, Maame Asabea. Thank you very much my daughter. Oweɛ no ɔdaa na ase, ɔdaa na ase. Fosua. Not at all. Goodbye. Wɔse nka saa. Bye-bye. enna wɔm dii nkra. So that's the meaning of the passage. Na deɛ ekɔ si ye nono. We have some questions. Five questions. We are going to answer them. If you can you put your hands up so that I call you. Question one. How much did Fosua pay for the plantains?
- 334 Chd.: Eighty cedis
- 335 Tr. : Question two. What did Fosua say about the plantains?
- 336 Chd.: They are very dear.
- 337 Tr. : Question three. What did Maame Asabea say about her plantains?
- 338 Chd.: My, my plantains are cheap.
- 339 Tr. : How much did Fosua pay for the salt?
- 340 Chn.: Ten cedis.
- 341 Tr. : What other thing did Fosua buy? Ernestina.
- 342 Chn.: Cooking oil.*****
- 343 Tr. : Pass your books forward.

APPENDIX 5 (40) TK: Ghanaian Language
LESSON : FORTY
SCHOOL : WA PARA-MILITARY PRIMARY
CLASS : P4
TEACHER: "TK"
SUBJECT: GHANAIAN LANGUAGE (READING COMPREHENSION)
TOPIC : HWAN NA YEƐ ADEƐ?
DATE : 28TH MARCH, 1996.

- 1 Tr. : ɛnnɛ Ƴɛsan ahyiam bio. Ƴɛrɛ bɛyɛ Twi. Twi no a Ƴɛrɛbɛyɛ no ɛyɛ **reading. Ƴɛrɛbɛ kenkan book. Book no a Ƴɛrɛbɛ kenkan no Ƴɛbɛ kan afiri page 22, page 22. Mo abue hɔ?**
- 2 Chn.: **Yes madam.**
- 3 Tr. : ɛnnɛ na aƳi no. aɛm a Ƴɛrɛka afa ho no hwan na obɛtumi aka akyerɛ Ƴɛn? Aɛm a Ƴɛrɛbɛka afa saa **page hɔ** no, hwan na ɔbɛ ka akyerɛ Ƴɛn? ɛwɔ hɔ Ƴɛde pen kɔkɔ n'atwerɛ. M'asan atwerɛ agu board no so. **Yes Daniel.**
- 4 Daniel : Hwan na ɛyɛ adeɛ
- 5 Tr. : No. ɛnyɛ hwan na ɛyɛ adeɛ. **Is what? What is this word?** Wei Ƴɛbɛka no sɛn?
- 6 Chn.: [Talking together]
- 7 Tr. : **Wonim a pagya wo nsa. Yes Odame.**
- 8 Odame: ɔyɛɛ .
- 9 Tr. : ɔyɛɛ. Mo mmɔ mo nsam ma no.
- 10 Chn.: [Clapping].
- 11 Tr. : **Okay, ɛnnɛ Daniel kan, kan. Hwɛ no yie.**
- 12 Daniel: Hwan na ɔyɛɛ adeɛ?
- 13 Tr. : Hwan na ɔyɛɛ adeɛ? ɛnnɛ me Ƴiyi words no bi afiri saa **passage yi mu. Words bi wɔ mu a ɛyɛ a ɛden kakra. Nti me Ƴiyi bi afiri mu na Ƴɛbobu din ansa na Ƴɛkan book no, mmo ate deɛ mereka no?**
- 14 Chn : **Yes madam. [followed by Talking together].**
- 15 Tr. : Afei obiara nhwɛ book no mu na ɔnhwɛ words no a m'atwerɛ agu ɛɛ **blackboard** no so na ɔnhwɛ book no mu. Words no wɔ book no mu. ɛnti hwɛ book no mu na hwɛ deɛ ɛgu **blackboard** no so no sɛ wo hwɛ mu na kan. Ƴɛ rebɛ kenkan.
- 16 Chn.: [Talking together].
- 17 Tr. : Afei Ƴɛ rebɛ kenkan words anaa sɛ ntwerɛ Ƴɛ m'atwerɛ agu **board** no so no. Ƴɛrɛbɛkenkan no mmaako, mmaako. Deɛ ɛdikan no Ƴɛbɔ din sɛn? **Yes Daniel.**
- 18 Daniel : **Anwummɛɛ.**
- 19 Tr. : **Anwummɛɛ.** Mo mmɔ mo nsam mma no.
- 20 Chn.: [Clapping].
- 21 Tr. : **Anwummɛɛ** mo nyinaa nka.
- 22 Chn: **Anwummɛɛ.**

- 23 Tr. : ebio.
- 24 Chn.: Anwummere.
- 25 Tr. : Wei nsoe! Wo a wo betumi abɔ din pagya wo nsa. Odame.
- 26 Odame: Nkɔmɔ
- 27 Tr. : Nkɔmɔ. Mo mmɔ mo nsam mma no.
- 28 Chn.: [Clapping].
- 29 Tr. : Nkɔmɔ. Mmo nyinaa.
- 30 Chn.: Nkɔmɔ.
- 31 Tr. : Nkɔmɔ.
- 32 Chn.: Nkɔmɔ.
- 33 Tr. : Wei nsoe? Yes Collins.
- 34 Collins: Kente.
- 35 Tr. : No. Musa.
- 36 Musa.: Kumasifoɔ.
- 37 Tr. : Mo mmɔ mo nsam mma no.
- 38 Chn.: [Clapping].
- 39 Tr. : Afei mo nyinaa nka.
- 40 Chn.: Kumasifoɔ.
- 41 Tr. : Dee etɔ so nsoe? Okay, dee etɔ so nso yebɛɔ din akyinnyee. Mo nyinaa akyinnyee.
- 42 Chn.: Akyinnyee.
- 43 Tr. : Na wei nsoe? Osumanu.
- 44 Osumanu: Mmɔfra
- 45 Tr. : Dabi yen duru hɔ. Yeka akyinnyee. Dee etoa akyinnyee so no yebɔ din sen? Appiah.
- 46 Appiah : Odwan.
- 47 Tr. : Odwan na egu soɔ no? Odame.
- 48 Odame: Ada tam.
- 49 Tr. : Ka biom.
- 50 Odame: Ada tam.
- 51 Tr. : Adantam. Mmo nyinaa.
- 52 Chn : Adantam.
- 53 Tr. : ebiom.
- 54 Chn.: Adantam.
- 55 Tr. : Wei yi nsoe? Yes Olivia.
- 56 Olivia: Mmɔfra.
- 57 Tr. : Speak louder.
- 58 Olivia: Mmɔfra.
- 59 Tr. : Mmɔfra. Mmo nyinaa.
- 60 Chn.: Mmɔfra.
- 61 Tr. : Wei yi nsoe? Isaac
- 62 Isaac: Bɔɔlo
- 63 Tr. : Dabi enye bɔɔlo. Oduro.
- 64 Oduro.: Bɔɔlo bɔ.
- 65 Tr. : Mmo mmɔ mo nsam mma no.

- 66 Chn.: [Clapping].
67 Tr. : Mo nyinaa nka.
68 Chn.: B▷lo b▷.
69 Tr. : Wei yi nsœ? enne wontumi nkasa koraa adentiara? Daniel.
70 Daniel.: Nnamfo▷.
71 Tr. : Nnamfo▷. Mmo mm▷ mo nsam mma no.
72 Chn.: [Clapping].
73 Tr. : Mo nyinaa mmonka.
74 Chn.: Nnamfo▷.
75 Tr. : ebiom.
76 Chn.: Nnamfo▷.
77 Tr. : Wei yi nsœ? Benin.
78 Benin: P▷nk▷.
79 Tr. : P▷nk▷. Mmo nyinaa.
80 Chn.: P▷nk▷.
81 Tr. : Na deε ε▷ so nsœ? Gloria
82 Ernestina: Nno▷ma.
83 Tr. : Nno▷ma. Mmo nyinaa.
84 Chn.: Nno▷ma.
85 Tr. : Wei yi nsœ? Yes Duku Olivia
86 Olivia: Mmilika
87 Tr. : San ka bio.
88 Olivia: Mmilika
89 Tr. : Hwan na ebeka no yiye? Maxwell.
90 Chn.: Mmirika.
91 Tr. : Mmirika. Mmo nyinaa.
92 Chn.: Mmirika.
93 Tr. : ebiom
94 Chn.: Mmirika.
95 Tr. : Odum.
96 Chn.: Odum.
97 Tr. : Odum.
98 Chn.: Odum.
99 Tr. : Wei yi nsœ? Asamoah.
100 Asamoah: Mpaboa.
101 Tr. : He, dabi enye mpaboa. Yes Musa.
102 Musa.: Mpaninfo▷.
103 Tr. : Mmo mm▷ mo nsam mma no.
104 Chn.: [Clapping].
105 Tr. : Mmo nyinaa mmo nka.
106 Chn.: Mpaninfo▷.
107 Tr. : ebio.
108 Chn.: Mpaninfo▷.
109 Tr. : Deε ε▷ so nsœ? Wei yi. Tokuro. Mmo nyinaa.
110 Chn.: Tokuro.

- 111 Tr. : ebio.
- 122 Chn.: Tokuro.
- 123 Tr. : Wei nsoe? Daniel
- 124 Daniel: Frankaa.
- 125 Tr. : Na deɛ etowatowaso nosoe? Odame.
- 126 Odame: Mɔden.
- 127 Tr. : Dabi. Florence
- 128 Florence: Mmɔnden.
- 129 Tr. : ekaa kakra bi. Hwan na ebeka no yiye? Prince.
- 130 Chn.: Mmɔden.
- 131 Tr. : Mmo mmɔ mo nsan mma no
- 132 Chn.: [Clapping].
- 133 Tr. : Mmo nyinaa nka.
- 134 Chn.: Mmɔden.
- 135 Tr. : ebio
- 136 Chn.: Mmɔden.
- 137 Tr. : **Okay. Word** bia yerebekyere aseɛ. Deɛ edikan no, yekase anwummere a enne edeen? anwummere enne edeen? Doris.
- 138 Doris: Se adeɛasa.
- 139 Tr. : Adeɛasa. Se adeɛasa ebi wɔ hɔ a na adeɛasa pii nso yeka no anwummere? eh! efiri ebɔ beye nnɔn mmeensa koɔ no yeka no anwummere. Ye kyea no anwummere. Na nkɔmmɔ nsoe? Se mmo nyinaa nso nim nkɔmmɔ.
- 140 Chn.: Anne.
- 141 Tr. : Se nipa mmeinu ka asem. Kumasifoɔ. Yekase Kumasifoɔ na ekyere sen? If you know, wonima pagya wo nsa. Maxwell
- 142 Maxwell: Wɔn a wɔte Kumasi.
- 143 Tr. : Wɔn a wɔte Kumasi. Na yeka se akyinnyee nsoe? Akyinnyee. **Yes Doris.**
- 144 Doris: Se wore gye obi akyinnyee
- 145 Tr. : Wanka no yiye. Antwi. Heɛ! Ye wɔ Twi nti morebekasa? Mese, wonim a pagya wo nsa na memfre wo. Wo kasaa mebo wo. Antwi.
- 146 Antwi: Se obi reka asem na wo gye no akyinnyee.
- 147 Tr. : Se wo ne obi reka asem, ase wonte aseɛ wahunu ahaa na wore gye no akyinnyee. Adantam nsoe? Adantam. Se obi, wo na se ɔwo mmeensa, deɛ odi kan no yeka no sen?
- 148 Chn.: Deɛ wɔdi akyire.
- 149 Tr. : He. Mese wonim a pagya wo nsa. Me kaeɛ wante? Osei Agyeman.
- 150 Osei.: Piesie
- 151 Tr. : Sen? Collins.
- 152 Collins: Meba panyin.
- 153 Tr. : Anaase panyin. enye meba panyin. Panyin . Piesie anaa panyin.? Deɛ etɔso mmeinu yebe ka no sen? **Yes Hanna.**
- 154 Hanna: Kumah.

- 155 Tr. : Dabi.
- 156 Chn.: [Laughing].
- 157 Tr. : Appiah.
- 158 Appiah: Kakyire.
- 159 Tr. : Dabi mese nkwadaa no ye mmeensa. dee wɔ dikan no ye panyin anaase piesie. dee wodi so no ye? Daniel.
- 160 Daniel: Ada ntɛmu
- 161 Tr. : Hum. Ada ntɛmu enno na yeka no adantam.ɛh! **Anaa in fact** wɔ no na wɔhye nnfinfii. enna dee etwa toɔ so yefre no sen?
- 162 Chd.: Kumah.
- 163 Tr. : Na se yekase mmɔfra nsoe? Se mo a mo nim mmɔfra? ɛha, mua mu wɔ dan mu ha mmo ye mmɔfra. bɔɔlo bɔ nsoe? eye agorɔ a ye die. ɛha! Na nnamfoɔ nsoe? **Okay**, se wo ne obi nam, na dabia monam, dee mo bekɔ bia. Bebia mobekɔ bia na mo mmeinu na ekɔ. enno na yeka no nnamfoɔ. Pɔnkɔ nsoe? Adeɛ eye pɔnkɔ ye aboa. enna yeye no den?
- 164 Chn.: Ye tena ne so.
- 165 Tr. : Afei ye toaso. Nnoɔma, nnoɔma. Mmo nim nnoɔma ɛh?
- 166 Chn.: **Yes madam.**
- 167 Tr. : Mmirika, mmirika nso saa. Odum, odum ye den?
- 168 Chn.: [Talking together].
- 169 Tr. : Wodeɛ me bebu. Esther.
- 170 Esther: edua.
- 171 Tr. : edua. Mpanyinfoɔ, mpanyinfoɔ. Yewɔ mmɔfra enna ye wɔ mpanyinfoɔ ɛh?
- 172 Chn.: **Yes madam.**
- 173 Tr. : Tokoro nsoe? Yeka se tokoro a, adeɛ a ekwan eye den? edamu ɛhe. Frankaa, frankaa. Prince.
- 174 Prince: **Ghana flag.**
- 175 Tr. : Dabi yeye Twi.
- 176 Chd.: enno na nka mebe ka
- 177 Chn.: [Talking together].
- 178 Tr. : Esther
- 179 Esther: Ankaa
- 180 Chn.: [Laughing].
- 181 Tr. : Dabi, Ghana flag,ɛhe. Ghana flag. Ne Twi na yeka no frankaa. Se enye Ghana flag nkoa. Adeɛ bi wo hɔ ye timi ye den? Yehim biribi ɛh. Se wonim biribi. Se book yi mbetumi ahimhim no. ɛhaa! enna mmɔden, mmɔden. Yeka se obi mmɔ mmɔden a ekyere sen? Afia saa
- 182 Afia.: Se obia wɔ ye adeɛ.
- 183 Tr. : Obia wɔ ye adeɛ. **Okay**, afei, afei yahunu saa nnoɔma yi nnyinaa no na yebe kenkan book no?
- 184 Chn.: [Talking together].
- 185 Tr. : Hwan na ɔbetumi a kan dee edikan no. **Okay**, Odame kan. Hye aseɛ kan.

- 186 Odame: Dabi anwummerɛ. Dabi anwummerɛ. Adɛɛ kɔ hyia Efa ne Asɔ
- 187 Tr. : Wɔhyia.
- 188 Odame: Wɔhyia saa.
- 189 Tr. : Wɔhyia saa no.
- 190 Odame: Wɔhyia saa no. Wɔhyia saa no ɔdi sukuu
- 191 Tr. : Wɔdii
- 192 Odame: Wɔdii sukuu mu nkɔmmɔ ma wɔm ani gyee. Nkɔmmɔ a na
- 193 Tr. : ɛyɛ wɔn.
- 194 Odame: ɛyɛ wɔn dɛ.
- 195 Tr. : Koraa.
- 196 Odame: Koraa ne bɔɔl bi.
- 197 Tr. : A.
- 198 Odame: Wɔ ne Kumasefo.
- 199 Tr. : Kumasefoɔ.
- 200 Odame: Kumasefoɔ. Kumasefoɔ bɔ
- 201 Tr. : Bɔɛɛ
- 202 Odame: Bɔɛɛ no ho, bɔɛɛ no ho nkɔmmɔ. Efa mo. Efa no, Efa na ɔkɔfa saa bɔɔl no ho asem ba
- 203 Tr. : Baɛɛ.
- 204 Odame: Baɛɛ.
- 205 Tr. : Okay, wayɛ adeɛ. mmo mmɔ mo nsam mma no
- 206 Chn.: [Clapping]
- 207 Tr. : Okay, Hwan na ɛbɛ kan Efa? Efa. Daniel
- 208 Daniel.: Efa, Efa. Daa yɛ ne Kumasifoɔ bɔ bɔɔl no dɛɛ, m, m, me ara, me hunuu saa
- 209 Tr. : Sɛ
- 210 Daniel.: Sɛ me bɔ bɔɔl paa
- 211 Tr. : Pa ara
- 212 Daniel.: Pa
- 213 Tr. : Pa ara
- 214 Daniel.: Pa ara. Sukuufoɔ no n
- 215 Tr. : Nyinaa
- 216 Daniel.: Sukuufoɔ, Sukuufoɔ, Sukuufoɔ no nyinaa ka sɛ mayɛ adeɛ.
- 217 Tr. : Mmo mmɔ mo nsam mma no
- 218 Daniel: [Clapping].
- 219 Tr. : Hwan na ɛbɛ kan adeɛ? Adeɛ oo! Okay, obi nkan adeɛ. Odame
- 220 Odame: Adeɛ, Adeɛ. Na mee? Me, na me nsoɛ. Me, me nso me bɔɔl papaapa..
- 221 Chd : Efa.
- 222 Tr. : Daniel
- 223 Daniel: Efa. Obi , obiara kaa sɛ me yɛɛ adeɛ sene wɔm a wɔ bɔɔl no nyinaa. Wo hunu sɛ ti, ti

- 224 Tr. : He, wo a kan aduru sene wɔ bɔɔ bɔɔl no nyinaa. eye full stop. Hwe se wobe humi ansa na wa toaso. enye hunu, wo ahunu se.
- 225 Daniel: Wo ahunu se tikya mpo kakyerɛ, be kyea me nsam maa me mmo, maa me mmo.
- 226 Tr. : Wo anhunu se tikya mpo bekyyea me nsam maa me amo hum! ehein, ewɔ se wo kan no saa. Efa.
- 227 Daniel.: Madam, eye Adɛɛ, na aduru ne so
- 228 Tr. : Adɛɛ
- 229 Odame: Adɛɛ Adɛɛ me nso, me nso me nipa.
- 230 Tr. : Me nipa
- 231 Odame: Me nso nipa.
- 232 Tr. : Ye se ase ha ye. Me nso nipa.
- 233 Odame: Me nso nipa beberee ka se.
- 234 Tr. : Me yee.
- 235 Odame: Me yee adeɛ na.
- 236 Tr. : ɛbia.
- 237 Odame: ɛbia wɔnte.
- 238 Tr. : Wo ante.
- 239 Odame: Wo ante.
- 240 Tr. : Efa
- 241 Daniel.: Efa. Nanso tikya ankyia wo nsam. Asɔ
- 242 Tr. : Asɔ. Wei deɛ ɔbaa oo! Hwan na ebe kan Asɔ? Okay, Asɔ. Me nso ampe a yebɔ ye no, nipa pii se meyeɛ adeɛ. Se yehwe mua, na meyeɛ adeɛ sene mmo baanu. Saa nkɔmmɔ yi danee akyyinneɛ wɔ efie hɔ. Wɔgu so regye akyyinneɛ saa no na Papa Poku baa hɔ. Wɔbisa wɔm deɛ nti wɔregye wɔm ho akyyinneɛ saa. Me wie. se mekan duru bebɛbia mbe bisa mo deɛ maduro na mmo de mu nsa asisi so. Na wo a wo anhunu no. Na afei na asem no ye no sere kwa. Obiara pe se Papa Poku ka bi ma no. Papa Poku mere be ka ayeseɛm bi akyerɛ mo. Na se motumi kyerɛ me deɛ wɔ bɔɔ mmɔden wɔ saa asem yi mu a, me nso mekyerɛ mo mmo mu deɛ ɔbɔɔ mmɔden agorɔ ahodoɔ a mmo kɔdii ye no mu. Ayeseɛm no nie. Yese ɔpanyin bi tena ase. Na ɔwɔ mma barima baasa. Na opanin no de Opoku. Adantam no de Owusu, enna akumaa no de Gyasi. Na ne maa no nyinaa ye mmɔfra pa. Na wɔm nyinaa nso nim pɔnkɔ so tena. Na wɔm mu biara nso wɔ ne pɔnkɔ. Dabi ɔpanyin no ka kyerɛ ne mma no se, ɔpe se ɔkye ne nnoɔma ma wɔm. Na mese ɔpanyin no yefre no sen? Serwah Adowa.
- 243 Serwah: Papa Poku.
- 244 Tr. : Papa Poku. Okay. Na ne mma no panyin no de sen? Na panyin no de sen? Adjei Doris.
- 245 Adjei. : Opoku
- 246 Tr. : Opoku. Mmo mmɔ mo nsam mma no
- 247 Chn. : [Clapping]

- 248 Tr. : enna kumaa no nso de sen? Na kumaa no de sen? Daniel.
- 249 Daniel. : Owusu
- 250 Tr. : Dabi enye Owusu. Collins
- 251 Collins: Gyasi
- 252 Chn. : Okay me toaso. Dabi ɔpanyin no ka kyere ne mma no se ɔpe se ɔkye ne nnoɔma ma wɔm. Nanso ɔnhunu dee esese ɔde nnoɔma no mu fa kese ma no. enti ɔfreɛ ne nnamfo bi ne ne mma no nyinaa ekɔ hyia ye. ɔka kyere ne mma no se, pe se ɔhunu wɔm mu dee ɔbetumi aye adeɛ kese a eso bi mmaa da. enno nti ,enno nti na wafre ne nnamfo nyinaa aba hɔ no. ɔfreɛ wɔm, ɔfreɛ wɔm se wɔm mbe hwe na wɔn nkyere ne mma no mu dee ɔbetumi aye adeɛ na ɔde ne nnoɔma mu fa kese ama no.
- 253 Chn.: [Talking together]
- 254 Tr. : ɔkyereɛ se ne mma no mu biara ntena ne pɔnkɔ no so. ɔyerɛɛ wɔm odum kese bi a esi n'afikyire baabi. ɔtoaso se ɔrefhwehwe wɔm mu dee ɔbetumi de ne pɔnkɔ no atu mmirika ahuri dua no, dua no mu. Opoku huri tena ne pɔnkɔ so. ɔde ne pɔnkɔ no nante nkakra, nkakra kɔ akyire. Afei ɔde pɔnkɔ no tuu mmirika a emu ye den. ɔreyɛ aduru odum, ɔreyɛ aduru odum no ho no, ɔde ne peaa wɔ odum no mu maa etwaa tokoro kese bi pueɛ akyire. enti Opoku ne ɔpɔnkɔ no nyinaa wuraa tokoro no mu kɔsii dua no akyi. Hwan na ebe kan? Odame kan.
- 255 Odame : Papa wa ayesem ye dee
- 256 Tr. : Yi dee
- 257 Odame: Yi dee eye huu paa.
- 258 Tr. : Wo kan a eye a kan no kese. Papa Poku. enti ɔpanyin no ne nnamfo yi bɔ gyee so, yiee!. Afei Owusu nso huri tenaa ne pɔnkɔ so. ɔno nso de ɔpɔnkɔ no tuu mmirika dendenden, aka kakra na waduru odum no ho no ɔde ɔpɔnkɔ no huri faa dua no nkɔmu besii fam. ehɔ ara na mpanyinfo yi sane bɔ gyee so yiee! Asɔ. Saa Aye sem yi dee eye nwanwa pa ara. Ye huri fa odum nkɔnmu sen? Papa Poku. Adantem no wice ne dee no. Afei na aka Gyasi. Na Gyasi so ne okumaa. Gyasi huri tenaa ne pɔnkɔ so. ɔde ne pɔnkɔ no tuu mmirika kidi, kidi, kidi. Dee wo hunu ye ara ne se ɔde pɔnkɔ no atutu odum dua no nyinaa ase na ekuta no a ɔre him no se frankaa. Nipa no nyinaa gyee bum dwane ye, kɔsii se ɔde dua no kɔ too ne papa ne ne mpanyinfo anim. ɔhimhim odum dua no kɔtoo ne papa ne ne mpanyinfo anim na ɔsere kwan kɔ ye. Mpanyinfo yi eb gyee so ema hɔ no nso. Opoku tenaa ne pɔnkɔ so de ne pea bɔ tokoro ema epueɛ akyire. Owusu, Opoku tenaa ne pɔnkɔ so de pea bɔ mu pueɛ akyire, ema wɔ ne ne pɔnkɔ no nyinaa wuraa mu kɔ pueɛ akyire. Owusu nso tenaa ne pɔnkɔ no so ede huri faa odum nkɔnmu besii fam enna Gyasi so huri tenaa ne pɔnkɔ so de pɔnkɔ no tutuu odum no ase him no se afrankaa de kɔtoo ne papane ne ne mpanyinfo no anim. Papa Poku

ano sii ye no, mmɔfra no bi se Gyasi na ɔbɔɔ mmɔden. ebinom se Opoku na ɔbɔɔ mmden, enaa afoforɔ nso se Owusu na ɔbɔɔ mmɔden. Na mmo nso wɔ mu hwan na mmo gyide se ɔmmɔden wɔ agorɔ no mu?

Okay, ayi no ase, nsem no asi. Me be bisa mo nsem afiri saa nsem yi a me kan ye ho. Mmo ntie no yiye. edikan, abɔfra ben na wɔkɔ sraa Efa ne Asɔ? Abɔfra ben na wɔkɔ sraa Efa ne Asɔ? Abɔfra no yefrɛɛ no sen? Osei Agyeman.

- 259 Osei : Adɛɛ
- 260 Tr. : Adɛɛ, mmo mmɔ mo nsam ma no.
- 261 Chn.: [Clapping].
- 262 Tr. : Na mese Papa no ne maa ye sen? Na Papa no maa ye sen?
Mary.
- 267 Mary.: Mmeensa.
- 268 Tr. : Mmeensa. Mmo mmɔ mo nsam ma no.
- 269 Chn.: [Clapping].
- 270 Tr. : Na, em, Gyasi no wɔ ne dee ehe? Gyasi no wɔ ne dee ehe? Boakye.
- 271 Boakye: Kakyire no
- 272 Tr. : Anaa se sen?
- 273 Boakye: Kumaa no
- 274 Tr. : Anaa se kumaa. Okay, na Owusu nsoe? Na Owusu nso ne dee ehe? Frank
- 275 Frank.: Aten ntamu
- 276 Tr. : Ye nka no aten ntamu. Yekaa sen? Prince
- 277 Prince.: Adantɛmu
- 278 Tr. : Ne maa mmeensa no obi nbɔ emu mmeinu din. emu mmeinu din. Na ne maa no ye mmeensa, emu mmeinu din. Eshun.
- 279 Eshun: Efa
- 280 Tr. : Dabi enye Efa
- 281 Chn.: ([Laughing and [Talking together]].
- 282 Tr. : Serwah
- 283 Serwah.: Poku.
- 284 Tr. : enna hwan?
- 285 Serwah: Gyasi.
- 286 Tr. : Opoku enna Gyasi. Mmo mmɔ mo nsam ma no
- 287 Chn.: [Clapping].
- 288 Tr. : Afei buku no ama ye nsem enum se yen yi ano. e, nsem enum a ese ye yi ano, yebe yi ano seesei a. Asem a edikan. Adeen nti na ɔpayin no maa ne mma tenatena wɔn apɔnkɔ so? Adeen nti na ɔpayin no eka se ne mma no tenatena wa pɔnkɔ so? eden na ebaa ye a enti wɔ ka saa kyere wɔn? Appiah.
- 289 Appiah: Na wɔ nim dee wɔde nnoɔma no kesee be ma no.
- 290 Tr. : Na ɔnim dee wɔde nnoɔma no mu kesee be ma no enno nti na wɔ ka saa kyere wɔn. Okay dee etɔso mmeinu. eden na Opoku

de ne pɔnkɔ no yɔye? . eden na Opoku de ne pɔnkɔ no yɔye? Wɔ no mu mmeensa ebiya ewɔ ekwan a wɔfaa so de pɔnkɔ no yeyɔ. Opoku deɛ no ne deɛ ewɔ he? Daniel.

291 Daniel: Wɔde no wuraa tokoro mu

292 Tr. : Wɔde no wuraa, wɔ ne pɔnkɔ no nyinaa wuraa debɛn? Odum, odum no mu enna eyɛ dɛn? Ayishatu.

293 Ayishatu: ɛpuee akyire.

294 Tr. : enna wɔnom puee dua no akyire. Afei deɛ ɛtɔso mmeensa, nipa bɛn na panyin no frɛfrɛ wɔn kaa ne mma no ho? Onipa bɛn na panyin no frɛ wɔn kaa ne mma no ho? Maxwell.

295 Maxwell: Kumasifoɔ.

296 Tr. : Dabi Antwi

297 Antwi.: Nadamfo

298 Chn.: Wo se nadamfo a na ɛkyerɛ sɛ baako.

299 Chn.: Madam, madam.

APPENDIX 5 (41) TK: Mathematics
LESSON : FORTY-ONE
SCHOOL : WA PARA-MILITARY PRIMARY
CLASS : P4
TEACHER: "TK "
SUBJECT: MATHEMATHETICS
TOPIC : ADDITION OF LIKE FRACTIONS
DATE : 27TH MARCH, 1996

- 1 Tr. : Okay, we are going to start the lesson. And we have mathematics. The topic is addition of like fractions. All of you.
- 2 Chn.: Addition of like fractions.
- 3 Tr. : Last week we did fractions. Hein. We did fractions. Part of a whole. Now today we are going, we have the same fractions but this one is like fractions. When you say like fractions what does it mean? Who can give me an example of like fractions?
- 4 Chn.: [Talking together].
- 5 Tr. : Okay, for example I have one over two, plus, we have addition, so this sign stands for addition. Do you understand?
- 6 Chn.: Yes madam.
- 7 Tr. : Okay, we have one over two plus one over two. This is like fractions. hein? When we have the same number here, the same number. Now this one is, eh, numerator and this is denominator. When we have the same denominator is like fractions. Now, this one. How are you going to do it? How are you going to do it? yes, try. Okay is a new thing. Now eh, we are going to add this and this. In order to get the answer you must bring your eh, line like this. Hum?
- 8 Chn. : Yes madam.
- 9 Tr. : Now you write one of this. We have the same number as what? Osei Kwame. The same number as what? What is this number? Solomon.
- 10 Solomon: Two
- 11 Tr. : Two. Very good. So you write one of the two here. When you finish you bring the one. Okay? Sorry when you finish you divide this by this and get what? Two divided by two is what? Oduro.
- 12 Oduro: One
- 13 Tr. : One. Now one times one is what? Multiply one by this one. Osei Agyeman
- 14 Osei.: One
- 15 Tr. : One. So you write one here. When you finish you bring your plus, eh! You bring your plus sign. You bring your plus sign. Now you are going to do the same thing to this one. So you divide two by two and get what number? two divided by two is what? Akua Owusuaa.
- 16 Akua: Two.
- 17 Tr. : Musa.
- 18 Musa: One.

- 19 Tr. : One. Now one times one is what? Osei Agyeman.
 20 Osei.: One.
 21 Tr. : One. Very good. So you write one. When you finish you bring your equal sign. Now you are going to add this one, one plus one? eh. Now one plus one will give you what? Gloria.
 22 Gloria.: Two.
 23 Tr. : Two. So you write two over what? Over the number which is what? Odame.
 24 Odame: Two
 25 Tr. : Two. So you get two over two. This is your answer. Hum?
 26 Chn.: Yes madam.
 27 Tr. : So this is how you are going to do it. Now if you can, you just write the denominators, the two numbers. This one. You write one plus one instead of dividing this and then multiplying by this. Hum? Okay, now have another example here. You have two over six plus what? Osei Manu.
 28 Manu: Three
 29 Tr. : Two over six plus what? What fraction? Georgina.
 30 Georgina: One over six.
 31 Tr. : One over six. Now what are you going to do. Mhum. Look at this one and answer the question. When I give you this what are you going to do? Now when I write this what is the next step I will do? Yes Maxwell.
 32 Maxwell: Times
 33 Tr. : No. Oduro.
 34 Chn.: Line
 35 Tr. : Line. You draw your line like this. Now what is the next step? After bringing the line. Yes Daniel.
 36 Daniel: Six.
 37 Tr. : You write six. One of this. Very good. You write six under the line. Aha, the next step is what? Yes Doris
 38 Doris: One.
 39 Tr. : What one?
 40 Doris.: Two
 41 Tr. : Okay, you write two. This one. You write the numerator first. First number you write two and then you bring your plus. Now what about this one? What number are you going to write? Yes Asiedu.
 42 Asiedu: One.
 43 Tr. : One. Very good. You bring your equal sign. What will be your answer? Patrick.
 44 Patrick: Three.
 45 Tr. : This is fraction. Three what? Yes Appiah.
 46 Appiah: Six
 47 Tr. : No. Your answer is what? When you reach here your answer is what?
 48 Chd.: Three over six .
 49 Tr. : If you know put up your hand. Gloria.
 50 Gloria: Three over six

- 51 Tr. : Three over six. Very good. Three over six. This is your answer. This one I divided this answer by this number. Eh. This one you can divide it. You can divide this number by this number and you get what? Osei Agyeman.
- 52 Osei.: One.
- 53 Tr. : One, now one times two is what? yes Hanna.
- 54 Chn.: Two.
- 55 Tr. : Two. So you get the number. That's why I write this number here. Now you can get the same one as this one. Who is to come and do this? Come and try. Yes Oduro. Hurry up.
- 56 Oduro: [Goes to the bb] Wode wei beka wei ho.
- 57 Tr. : efiri he? Write the number here. Mhum. Aha, eden na wohyehye no h□? Is he correct?
- 58 Chn.: Yes
- 59 Tr. : Clap for him
- 60 Chn.: [Clapping].
- 61 Tr. : Now he wrote the five. Eh, You have the same number as five, so you write five here. After bringing your line you write five and then you write this one. That's the denominator and then you bring your plus and bring this three. When you finish you bring this equal sign. Now one plus three is what?
- 62 Chn.: Four
- 63 Tr. : One plus three is what? If you know it put up your hand. Osei Kwame
- 64 Kwame: Four
- 65 Tr. : That's why he had this four. Hum?
- 66 Chn.: Yes madam.
- 67 Tr. : When you write the four you bring a line and then you write what? Asamoah.
- 68 Asamoah: Five.
- 69 Tr. : Five, so you get four over five. That's the correct answer. Solomon stand up. What's the first step? Okay, I have drawn the line. Stand there and talk.
- 70 Solomon: The first number is six. And the second one is. Is two. And the doing it? Two plus two.
- 71 Tr. : No that's not. Okay, Appiah
- 72 Appiah: The first number is seven.
- 73 Tr. : Where are you going to write the seven? Go and write it.
- 74 Appiah: Goes to the bb and writes.
- 75 Tr. : Clap for him.
- 76 Chn.: [Clapping].
- 77 Tr. : okay, he has write the seven. Now what's the next one? The next step is what? Yes Odame. Stand there and speak
- 78 Odame: Three.
- 79 Tr. : Where did you get the three? Yes where did you get the three? Go and show me. Show me the three. Okay, now apart from this, which

- way can you get to get the three? Which step are you going to use to get the three? This three Osei Agyeman.
- 80 Osei: Seven divided by seven. One. One times three, three.
- 81 Tr. : Clap for her.
- 82 Chn.: [Clapping].
- 83 Tr. : Very good. Seven divided by seven is one, and one times three is what? Three. Okay, come and write the three. Come and write the three. Sit down. Yes Eshun go and write the three.
- 84 Eshun: [Writes three].
- 85 Tr. : Okay very good. This is the three. Now what is the next step? Yes Patrick.
- 86 Patrick: Two.
- 87 Tr. : What two? Why two? No that's not the next step. Yes Hanna.
- 88 Hanna: Plus two.
- 89 Tr. : Plus two. How did you get the two? Where do you get the two? She said plus two. Okay I will write the plus but, where do you get the two? Why do you get the two? He said plus two. Okay I have write the plus. But where do you get the two? Tell me. Okay Doris.
- 90 Doris: Seven divided by seven, seven.
- 91 Chn.: [Laughing]
- 92 Tr. : Hey!, don't laugh. You said seven divided by seven. Hein?
- 93 Doris: Seven divided by seven, one, plus, times two, two.
- 94 Tr. : Very good. Clap for her.
- 95 Chn.: [Clapping].
- 96 Tr. : Seven divided by seven is one and one times two is what? Come and write the two. Yes.
- 97 Chd.: [Writes the two].
- 98 Tr. : Okay, very good. Now what will be your answer? What answer do you get? Yes Frank
- 99 Frank: Five over seven
- 100 Tr. : Five over seven. Clap for him.
- 101 Chn.: [Clapping].
- 102 Tr. : Go and write it.
- 103 Frank: [Writes it on the bb].
- 104 Tr. : Okay, now I want somebody to come and write an example. Come and write an example so that we can do it. Okay, go and try
- 105 Chd.: [Goes to the bb]
- 106 Tr. : Hurry up and sit down.
- 107 Chd.: [Writes on the bb]
- 108 Tr. : No you are wrong. We are doing like fractions. You write here eight and you write here two. Does not the correct.
- 109 Chn.: Madam, madam.
- 110 Tr. : edwom? Nimo you must rub the questions. Okay, Agartha.
- 111 Agartha: Madam, madam
- 112 Tr. : No. rub all of them and write yours.
- 113 Agartha: [Writes a question on the bb].
- 114 Tr. : Okay, Mhum. Okay, clap for her.

- 115 Chn.: [Clapping].
- 116 Tr. : What's the first step? Yes Hanna.
- 117 Hanna.: Four.
- 118 Tr. : Four? No. Is not four. Yes Oduro.
- 119 Oduro: The first step is three.
- 120 Tr. : Go and write it.
- 121 Chn.: [Goes to the bb and writes].
- 122 Tr. : Clap for him.
- 123 Chn.: [Clapping].
- 124 Tr. : The first number is three. You write one of these. Hum? That's three. Now what again? After writing the three? Always the same persons' hands. Yes Gloria. I am coming.
- 125 Gloria: Three divided by three, one, one times four, four.
- 126 Tr. : Clap for her.
- 127 Chn.: [Clapping].
- 128 Tr. : Write the four.
- 129 Gloria: [Writes it at the wrong place].
- 130 Tr. : You were not here, okay.
- 131 Chn.: Madam, madam.
- 132 Tr. : Write the four
- 133 Chd.: [Writes on the bb].
- 134 Tr. : Hey! Is that how you write four?
- 135 Chn.: [Laughing].
- 136 Tr. : You will write four twenty times when you see the letters. Okay you have write the four. Now what again? Bee come and write the next step.
- 137 Beatrice: [Goes to the board and writes four]
- 138 Tr. : How do you get four? Yes tell me. How do you get this four? You can't? Georgina how do you get the four?
- 139 Georgina: Three divided by three, one. One divided by four, four
- 140 Tr. : How do you get four? Yes Osei Agyeman.
- 141 Osei: Three divided by three, one. One times four, four
- 142 Tr. : Clap for her.
- 143 Chn.: [Clapping].
- 144 Tr. : Three divided by three. This number by this number. Hein? You get one, one times four gives you four. You get the four. Do you understand?
- 145 Chn.: Yes madam.
- 146 Tr. : Now what will be your answer? Adu Doris.
- 147 Adu: [Writes the answer]
- 148 Tr. : Okay is eight divided by three. This is bigger than this number but, we are dealing with like fractions so is correct.. Okay, another person should come and write the question for us. A question. Osei Agyeman
- 149 Osei: [Goes to the bb and sets a question].
- 150 Tr. : Okay clap for her.
- 151 Chn. : [Clapping].

- 152 Tr. : Five over nine plus five over nine. We have the same like fractions. Now what's the next step? Yes Ernestina.
- 153 Ernestina: Three.
- 154 Tr. : No, is not three. Davis.
- 155 Davis: Nine.
- 156 Tr. : Go and write the nine.
- 157 Davis: [Writes nine].
- 158 Tr. : Okay, that's correct. What again? What are you going to do? Mhum, yes Daniel.
- 159 Daniel: [Goes to the bb]
- 160 Tr. : Yes Osei Kwame.
- 161 Kwame: Nine divided by nine, one. One times five, five.
- 162 Tr. : Clap for her. Sorry clap for him
- 163 Chn.: [Clapping].
- 164 Tr. : You get nine divided by nine is one. And one times five is five. So you write five and bring your plus. Is the same thing as this one. Mm? This one you divide nine by nine and get what?
- 165 Chn.: One
- 166 Tr. : If you know put up your hands. Nine divided by nine is what? Felix.
- 167 Felix: One
- 168 Tr. : One. Now, one times five is what? Yes Vida.
- 169 Vida.: Five.
- 170 Tr. : It's five. What will be your answer? Esther?
- 171 Esther: Ten over nine.
- 172 Tr. : Ten over nine. When you are speaking speak aloud. Hein? You get ten over nine. Okay, now we are going to work these examples on the board Mm? Daniel give them the maths books
- 173 Daniel: Madam.
- 174 Tr. : Maths exercise books. You have only five minutes. So when you get the book you must hurry up.
- 175 Daniel: [Distributes books].
- 176 Tr. : Eh, exercise books na wode textbooks na ema wɔn?
- 177 Chn.: [Talking together].
- 178 Tr. : **Ma woho nye ha**
- 179 Daniel: **Mary Fosu.**
- 180 Chn.: **W'anba.**
- 181 Daniel: **Ayishietu**
- 182 Chn.: **W'anba.**
- 183 Tr. : Up. Go and sit down. Kwame Asamoah
- 184 Chn.: **W'anba.**
- 185 Tr. : Up. Go and sit down.[Joins the distribution of books] Odame go and do your work. Serwah Hanna, Serwah Hanna. Where is she?
- 186 Chn.: [Talking together].
- 187 Tr. : [Continues the distribution of books]. Who hasn't got his or her book? Okay start work.
- 188 Chn.: [Start working].

- 189 Tr. : Now, the questions are. Number one, We have three over eight plus one over eight. Eh? Okay number two, we have two over eleven plus six over eleven. Number three. We have three over ten plus four over ten and number five, we have eight over sixteen plus five over sixteen, and the last number, the last question, number five. Five, seven over twelve plus two over twelve
- 190 Chn.: [Working]
- 191 Tr. : Where from you?
- 192 Chd.: Going to collect my [shows pen to teacher].
- 193 Tr. : Okay.
- 194 Chn.: [Working].
- 195 Tr. : Write today's date and then you must write the subject and then the topic.
- 196 Chn.: [Talking together and working].
- 197 Tr. : Where is this boy? Hey! David, where are you going?
- 198 David: [Runs out].
- 199 Tr. : [Goes round]. Do it here. Where are you going?
- 200 Chd.: Silent.
- 201 Tr. : You can't talk? I told you that this one you are going to use five minutes. So you must hurry up.
- 202 Int. : Noise from the next class.
- 203 Tr. : Hey go for a pen. put the pen down. Have you finished? When you finish pack all the papers. Do you understand? Who is on number five?
- 204 Chn.: [Some children raise hands up].
- 205 Tr. : Only three, four. We have one minute more
- 206 Chn.: [Working amid noise from the next class]
- 207 Tr. : Get ready to stop work.
- 208 Chn.: [Working]
- 209 Tr. : Okay stop work. Stop work. Sit down. Go and sit down. Close your books. We are going to answer the questions
- 210 Chn.: [Talking together and some children still working]
- 211 Tr. : Hey! Close your books. Appiah Dankwa. Okay number one. The question is three over eight plus one over eight? What are you going to do? You must bring your line. Now what number are you going to write? Odame.
- 212 Odame: Eight.
- 213 Tr. : Eight, very good. So you write eight here, hum? When you finish you move to what first? Yes Osei Agyeman
- 214 Osei: Eight divided by eight, one. One times three equals to three.
- 215 Tr. : Clap for her.
- 216 Chn.: [Clapping]
- 217 Tr. : Three, now you write three here and then you bring this sign, plus. You write it. Now what about this one? Mary.
- 218 Mary: Eight divided by eight, one. One times one, one
- 219 Tr. : Very good. Eight divided by eight is one. One times one is one. Now the answer is what? Your answer is what? Yes Osei Manu.
- 220 Manu : Four.

- 221 Tr. : No, Ayishietu.
222 Ayishietu: Four divided by eight.
223 Tr. : No. Yes Serwah Hanna.
224 Hanna: Four over eight
225 Tr. : Clap for her.
226 Chn.: [Clapping].
227 Tr. : Is four over eight, not four divided by four. The answer is four over eight. Okay question two. Question two. You bring your line. What number are you going to write? What number I'm I going to write? What number Afei Saa?
228 Afia.: Eleven divided by
229 Tr. : What number? Which one. What number are you going to write? Here? Speak louder.
230 Chn.: Eleven
231 Tr. : Eleven. So you write eleven here. After this what are you going to do? Yes, yes Bee.
232 Chn.: Two divided by two.

APPENDIX 5 (42) TK: Science
LESSON : FORTY-TWO
SCHOOL : WA PARA-MILITARY PRIMARY
CLASS : P4
TEACHER: "TK "
SUBJECT: ELEMENTARY SCIENCE
TOPIC : SOIL TYPES
DATE : 20TH MARCH, 1996

- 1 Tr. : Okay, pay attention. Now you must speak louder. Do you understand?
- 2 Chn.: Yes madam.
- 3 Tr. : He ka wo ho na yi bag no firi hɔ. Ka wo ho yi bag no firi hɔ.
- 4 Chn.: [Talking together].
- 5 Tr. : Wɔn fa ne nyinaa, wɔn fa ma ne ndɔso.
- 6 Chn.: [Talking together].
- 7 Tr. : Okay, we are going to do elementary science and the topic is soils. All of you soils, soils.
- 8 Chn.: Soils.
- 9 Tr. : Now you open at page five, page five.
- 10 Chn.: [Open their books].
- 11 Tr. : Okay tell me the topic on page five. Yes Osei Agyeman.
- 12 Osei: Soils.
- 13 Tr. : Again.
- 14 Osei: Soils.
- 15 Tr. : Yes Odame.
- 16 Odame: Soils.
- 17 Tr. : Again.
- 18 Odame: Soils.
- 19 Tr. : All of you.
- 20 Chn.: Soils.
- 21 Tr. : Now we have three different kinds of soils. Three different kinds of soils. Now these soils, one is what? Clay. Okay if you Know put up your hand. One is what? Yes Patrick.
- 22 Patrick: Cray.[clay]
- 23 Tr. : Say it again.
- 24 Patrick: Cray. [clay]
- 25 Chn.: [Laughing].
- 26 Tr. : Yes Moses
- 27 Moses: Clay
- 28 Tr. : Again
- 29 Moses: Clay.
- 30 Tr. : Clay all of you.
- 31 Chn.: Clay
- 32 Tr. : Clay soil

- 33 Chn.: [Talking together].
- 34 Tr. : Okay the next one is what? Yes Antwi.
- 35 Antwi.: Some soil.
- 36 Tr. : Yes say it again.
- 37 Antwi.: Some soil.
- 38 Tr. : Say sand. All of you, sand.
- 39 Chn.: Sand.
- 40 Tr. : Sand.
- 41 Chn.: Sand.
- 42 Tr. : And the last one is what. The last one is what?
- 43 Chn.: Silence
- 44 Tr. : Okay Solomon.
- 45 Chn.: Soil
- 46 Tr. : No. The last one is what? Yes
- 47 Chd.: Garden soil
- 48 Tr. : What? Read from the book. From the book we have clay sand and what? Yes Patrick.
- 49 Patrick: Black soil.
- 50 Tr. : Or what? Or loamy soil. All of you loamy soil, loamy soil.
- 51 Chn.: Loamy soil.
- 52 Tr. : Again.
- 53 Chn.: Loamy soil.
- 54 Tr. : Loamy soil. Now these three soil. that's loam. These three soils. We have it in different groups. This one is with one group. This one another group and this one another group. So I am going to show you some of the examples of soil. These three soils. Hey! Come. Okay I will call you according to rows. You are going to. You will come here and examine the three kinds of soils. He! So that you know the differences. The first group. First row come. All of you come.
- 55 Row 1: [Move to teacher's table].
- 56 Tr. : You start from right. Hum? This my right. This is what? This is clay. This is sand and this is loam. Hein?
- 57 Row 1: Yes madam.
- 58 Tr. : Or black soil. Now you can taste the texture. **Fa wo nsa susom. Sɔ ne nyinaa mu si tiree. Aha. Okay go and sit down.**
- 59 Row 1: [Moves back to their seats].
- 60 Tr. : Group two.
- 61 Row 2: [Moves to teacher's table].
- 62 Tr. : This is clay. This is sandy and this is loamy. Hein? Now can taste the texture.
- 63 Row 2.: [Feels the texture].
- 64 Tr. : Okay go and sit down.
- 65 Row 2.: [Go back to their seats].
- 66 Tr. : The third row.
- 67 Row 3: [Moves to teacher's table.]
- 68 Tr. : This is clay. This is sandy and this is loamy.
- 69 Chd.: **Wei ye edeen?**

- 0 Tr. : Yes, okay come, the two of you come.
- 71 Chn.: [The two follow the teacher].
- 72 Tr. : Places them in front of the group close to the samples. This is clay. This is sandy and this is loamy. Okay sit down.
- 73 Row 3: [Go back to their seats]
- 74 Tr. : Now I want you to read from the book. You have seen eh, some of the differences in the soils. The first one is clay soil and we said clay soil holds a lot of water. So this may become water log. Like this. You can see that it holds a lot of water. Hein?
- 75 Chn.: Yes madam.
- 76 Tr. : There is no water in this soil. So it always become water log. Okay, apart from that water pass through it very slowly. Water pass through it very slowly. Because of this the water pass is very slowly. *ekyerε se eyε den no nti, nsuo no εko mu a εfa mu nkakrakakra enye pii. Mmo te deε me ka no ase?*
- 77 Chn.: Yes madam.
- 78 Tr. : Now it says it has only small air spaces. *Mframa fa mo kakra bi* because *eyε den. εnna dεbiara eyε twann*. Okay because of this many plants cannot grow in clay soil. Many plants cannot grow in clay soil. Do you understand?
- 79 Chn.: Yes madam.
- 80 Tr. : Okay, let's go to sand. This one is sand. It says a sandy soil holds very little water. It has large air spaces. This one it holds very little water because of what?
- 81 Chn.: Silent.
- 82 Tr. : *Aden nti na wei nsuo kakra εnna εfa mu? Afei nsuo kakra bi na εgyina mu. Aden ntiara? Who can tell me?*
- 83 Chn.: [Raise hands up].
- 84 Tr. : Okay Solomon.
- 85 Solomon: *εε, wei no nsuo kakra bi bε gyina mua ma awia abɔ so na atwe afiri mu nti. ε, eyε saa no na nsuo kakra bi na abε gyina mu.*
- 86 Tr. : Okay, *wa ka bi. Anaa se sεn? εkwan ben so bio? Yes Maxwell.*
- 87 Maxwell: *eyε saa na aye mmrεmrε.*
- 88 Tr. : *Deε me kayε no wo ante aseε. Okay, deε wɔka yε no yε one answer. Afei nso εmu wɔ hare. Nti nsuo tɔ yε a, na atwe kɔ fam. Nsuo no εtumi ɔngyina mu papa. Weisei awia bɔ a wo hunu sε aye dεn? Na a wo. Aha! Okay it has large air spaces. Yεse εmframa no fa mu paa. Aden ntiara? Aden nti na mframa fa mu paa kyene wei?*
- 89 Chn.: Show of hands.
- 90 Tr. : Yes Doris.
- 91 Doris: *εnno mu wɔ hare ntiara.*
- 92 Tr. : *εmu wɔ hare. Hein? Wɔse εmu wɔ hare nti na mframa fa mu paa no. Okay, εm, another one is that many plants cannot grow in sandy soil. εε, ndua, wo dua biribi wɔ mua εhyε da enyini papa. Aden*

ntiara? Who can tell me? Yese wei no se ye dua biribi wɔ mu a enyini papa. Who can tell me the reason why? Okay Moses.

93 Moses: εε, nsuo enim.

94 Tr. : εnsuo enim. Mhum. Nsuo etumi engyina mu. enna afei nso deben bio? Meka ennoɔma mmeinuu. Yes Antwi.

95 Antwi: εmu wɔ hare

96 Tr. : Afei nso εmu wɔ hare. Okay, now let's go to the last one. Loamy soil. Loamy soil. This is a loamy soil. Now what do you think? Who can tell me the reason why this one is very black? Who can tell me the reason why? Aden nti na wei eye black paa

97 Chn.: [Talking together].

98 Tr. : Solomon. eye a, kasa kase.

99 Solomon: efiri se wei no ye dua nnoɔma wɔ so nti se aye black saa anaa se ande kakra a ennoɔma no entumi.

100 Chn.: eden nti na wei no eye black? eye den na eno nkoa etimi ye black? Aden nti na sand no dee enye black na enno nkoa eye black? Yes Osei Kofi.

101 Kofi: ewira na eye a eporɔ ka no.

102 Tr. : Okay, ewira porɔ ka no. enno ye one. enna afei eden bio? ewira porɔ ka no eye one point. eden bio na aka no ma ne yee black? Yes Rebecca.

103 Rebecca: Wɔm etu ewira egu mu.

104 Tr. : Se enoa na wɔka ye no. We have two things, ewira enne den?

105 Chd.: enna ogya

106 Tr. : egya, ehein, enna eden? enna emmoa hum? emmoa nso ka ho. Se wo kɔ nwiram paa, forest a emmoa noa wɔm awuo nyinaa no, wɔ wu a, wɔ wu etɔ, ede sen? ennɔtee no so. Nti na wo be hunu se ɔhɔ aye den? ɔhɔ, ehɔ colour no achangi[it changes] abe ye black. Afei so bebia ye gu wura no, wo gu wura pii a saa fako hɔ kakraa no. Wo behunu se aye den? Achangi [It changes] aye black. What do you know? Which of these soils is good for farming? Or do you grow plants in it. The three soils. Yes Frimpong.

107 Frimpong: Black.

108 Tr. : Yes Odame.

109 Chn.: Black soil

110 Tr. : Or what?

111 Chn.: Loamy soil

112 Tr. : Loamy soil. Loamy soil. This one. This one is good for farming. Why, why is it good for farming?

113 Chn.: [Talking together].

114 Tr. : Because of what? Mhum. Aden nti na wei sei dee yede dua ennoɔma a yese eye yiye paa ekyene soils no a aka no? ekyere se borɔfo no dee mmo nte, okay.

115 Chd. : ennoɔma porɔ ka no.

116 Tr. : ennoɔma ben saa?

- 117 Chd.: Se ebia mmoa no mo saa no.
- 118 Tr. : emmoa epor ka no. enti etimi ma enno ma noa wo dua, anaa se wo dua aduaba biara w so a eye den? eye yiye. Apart from emmoa no deben bio?
- 119 Chn.: [Talking together]
- 120 Tr. : Yes Asiedu.
- 121 Asiedu: Ogya
- 122 Tr. : Ogya ena den?
- 123 Asiedu: Ahaban
- 124 Tr. : Ahaban. Okay, se ahaban no te a, na ete gu a, bebia ahaban no bete ak to no wo behunu se ebe duru mmere bi no na aye den? Na enye green bio. Na ahaban no achangi [it changes] colour. Aye te se brown. enti efiri brown no mu a, wobe hunu se na awo koraa na aka anhwea. Na saa h kakra no aye den? Na aye black anaa se brown. enti wode dua biribia eye den? eye yiye. Okay, em, I'm going to read about loamy soil. okay some body should read.
- 125 Chn.: Quiet.
- 126 Tr. : Okay a loam is a mixture of sand, clay and humus, humus. All of you humus
- 127 Chn.: Humus
- 128 Tr. : Now what is humus?
- 129 Chn.: [Talking together and some Chn. raise their hands.]
- 130 Tr. : Yes Maxwell.
- 131 Maxwell: Mmoa
- 132 Tr. : And then what? Okay Collins
- 133 Collins: Anaa se egya
- 134 Tr. : Anaa se den?
- 135 Chd: Nwira.
- 136 Tr. : Nwira. Okay humus is dead plant. edua a awuo anaa se ewira aye den? Awuo and then animals materials. emmoa w moa awuo ene ndua a awuo anaa se ewira ahyee no eka bom ema ye nya den? Ye nya humus. Na, it makes the soil fertile. Wei etimi ma soil no eye den? eye rich. eye paa. Se ebe ye a, wo dua biribi w soa ebe ye den? ebeye yiye. Na loam holds water but does not become water log. Wei nsuo gyina mu. Na emom ensuo noa egyina mu no enti se clay. Do you understand?
- 137 Chn.: Yes madam.
- 138 Tr. : Aden ntiara? Yese wei nsuo gyina mu. Nsuo tumi gyina mu paa but enti se wei anaa se enye tw m te se clay. Aden ntiara? Okay Serwah.
- 139 Serwah: emu w hare.
- 140 Tr. : emu w hare. Afei eti sen? emu w hare but emu enye hare pii te se sand. Mmo te ase?
- 141 Chn. : Yes madam.
- 142 Tr. : Okay it has enough air for full plant growth. Wei mframa tumi fa mu kakra, se ebe ye a wo dua biribia w mua ebe ye den? ebe

ye yiye. Plants grow well in a loam soil. Biribiara wo be dua wɔ so bia eye den? eye yiye because of humus. Because of this one. Humus, dead plant and animal leaf. Now which of these three soils can you use for modelling? Modelling. Deɛ ehe na yede enwe ne biribi a, anaa se yede ye biribia eye yiye? ne mmeensa. Yes Antwi.

- 143 Antwi.: Clay soil
- 144 Tr. : Clay soil. Clap for him.
- 145 Chn.: [Clapping].
- 146 Tr. : Aden nti na clay soil? Osei Agyeman.
- 147 Osei.: efiri se emu wɔ duru.
- 148 Tr. : emu wɔ duru. enna Afei daben bio? eden na ema mu ye duro?
- 149 Chn.: [Talking together].
- 150 Tr. : Now this is English. Yes Paulina.
- 151 Paulina: Water.
- 152 Tr. : Water. Clap for her.
- 153 Chn.: [Clapping].
- 154 Tr. : Because of water that's why it has become so thick eh! So If you use it to mould anything it can do it. Now what are some of the thing we use clay soil to mould? Den nnoɔma na yede saa wei eyɔ? ennoɔma ben saa? Okay, Serwah.
- 155 Serwah: Yede eye kukuo.
- 156 Tr. : Yede enwene kukuo. esan de ye bukyeya. You must speak in English. Speak in English. You know some of the things. Yes Antwi.
- 157 Antwi: Pɔɔyowa.
- 158 Chn.: [Laughing].
- 159 Tr. : Yes Moses.
- 160 Moses: Yede nwene a pot.
- 161 Tr. : Pot. Clap for him.
- 162 Chn.: [Clapping].
- 163 Tr. : Apart from pot what other things?
- 164 Chn.: Some children raise hands up.
- 165 Tr. : Yes Kwarteng.
- 166 Chn.: Sedwa.
- 167 Tr. : Sedwa.. Clap for him.
- 168 Chn.: [Clapping].
- 169 Tr. : Toys hein? Toys, different kinds of toys
- 170 Chn.: Madam.
- 171 Tr. : Tick ta, ede sen! Fruits and vegetables, eh! You can use this toys to mould it. Now we are going to.
- 172 Chn.: [Talking together].
- 173 Tr. : Hee! Hee! I am going to ask you questions for all that we have learnt. Now I told you that we have ee, How many different kinds of soils? How many different kinds of soils do we have? How many? You must speak louder. Yes Maxwell.
- 174 Maxwell: Three.

- 175 Tr. : Three. clap for him.
 176 Chn.: [Clapping]
 177 Tr. : Okay one is what? Give me one
 178 Chn.: [Talking together].
 179 Tr. : Yes Daniel.
 180 Daniel: Black soil.
 181 Tr. : Yes Moses.
 182 Moses: Clay soil.
 183 Tr. : Clay soil. Yes we have got one. What again? Solomon.
 184 Solomon: Loamy soil.
 185 Tr. : Loamy soil and the last one is what?
 186 Chn.: Madam, madam.
 187 Tr. : Yes Antwi.
 188 Antwi: Black soil.
 189 Tr. : Somebody has mentioned it. Okay Gloria.
 190 Gloria: Sand soil
 191 Tr. : Sandy soil. Now these are the three different kinds of soils. One is clay soil, sandy soil and then loamy soil as I put it here. Okay which of these three pairs is good for a farming or do we grow plant in it. Which of the three soils. Yes Doris.
 192 Doris: Black soil.
 193 Tr. : Or what?
 194 Doris: Sand soil
 195 Tr. : I have written another word on the board. I didn't write black soil on the board. What? Ernestina.
 196 Ernestina: Loamy soil.
 197 Tr. : Speak louder.
 198 Chn.: Loamy soil.
 199 Tr. : Clap for her.
 200 Chn.: [Clapping].
 201 Tr. : Loamy soil. Okay, why is it that loamy soil is good for farming? Yes. Why is it that loamy soil is good for farming? Aden nti na loamy soil eye ma afuom ye? Aden ntiara? tena yiye. Yes.
 202 Chd.: efiri se etimi ma nnoɔma no bɔ.
 203 Tr. : eti sen? etimi ma nnoɔma no bɔ. eden na ema saa soil no nkoa wo de ye afuom a eye yiye? Deeben adee enna ema ne ye saa? edeben enna ema no baa saa?
 204 Chn.: Madam, madam.
 205 Tr. : Yes Boakye.
 206 Boakye: etumi bɔ nnoɔma so ban
 207 Tr. : Question a me ka ye wa ante asee. Mese eden na ema saa loamy soil no yede ye afuo a eye yiye. eden na emaa saa soil no nkoa eye rich a yede ye afuo a eye yiye? Yes Osei Manu.
 208 Manu: ewura.
 209 Tr. : ewura ehein! ee wura enna den? edeben bio? Yes Oduro.
 210 Oduro: Because animal skins are all in

- 211 Tr. : Animal, eh, dead animals are also in and what again? What again? Patrick tena hɔ yiye.
- 212 Patrick: Ogya.
- 213 Tr. : Okay, because of humus. All of you, humus.
- 214 Chn. : Humus.
- 215 Tr. : Again.
- 216 Chn.: Humus.
- 217 Tr. : What do eh, what is this humus? Mhum. eden enna ema ye nya humus no? Den na eden enna ema ye nya humus no? Yes Osei Kofi.
- 218 Kofi.: ewura enna
- 219 Tr. : ewura na ate agu fam.
- 220 Kofi.: enna mmoa.
- 221 Tr. : emmoa aye den?
- 222 Kofi: enna ogya.
- 223 Tr. : Wɔm aye den?
- 224 Kofi: emmoa a wɔm wu wuo.
- 225 Tr. : Okay, He! Aden nti na mu gugu epoma no ano hɔ nom? Hein?
- 226 Chn : [Talking together].
- 227 Tr. : Okay I also said that em, these three soils, one is water log. One becomes water log. Which one does it become water log? Which one? Yes Odame.
- 228 Odame: Clay soil.
- 229 Tr. : Again.
- 230 Odame: Clay soil.
- 231 Tr. : Clay soil. Clap for him.
- 232 Chn : [Clapping].
- 233 Tr. : Clay soil. This one. It always become water log. Aden nti enna mese dabiara na nsuo gyina mu? Yes Ntim
- 234 Ntim: emu wɔ du.
- 235 Tr. : efiri se emu wɔ duru. eden nti enna ema emu ye duru? Yes Doris.
- 236 Doris: Nsuo.
- 237 Tr. : Nsuo noa. Now which of the three types is not water log? Which of the three types is not water log?
- 238 Chn : [Talking together].
- 239 Tr. : Appiah
- 240 Appiah: Sandy.
- 241 Tr. : Sandy soil. Very good. Sandy soil. Now I also said that ** Name three soils. One has a lot of air space. Which of them has a lot of air space? Dee ewɔ he na mframa timi fa mu paa? Ne mmeensa. Paulina.
- 242 Paulina : Black soil.
- 243 Tr. : No is not that soil. Yes Antwi.
- 244 Antwi: Sand soil.
- 245 Tr. : Yes Maxwell
- 246 Maxwell: Loamy soil.

- 247 Tr. : It's not loamy soil. Yes Solomon.
- 248 Solomon: Sandy soil.
- 249 Tr. : Sandy soil. Clap for him.
- 250 Chn : [Clapping]
- 251 Tr. : You have got the word properly. hein? Speak the word properly. Words yi nyinaa na egu board no so. enti wo bɔ din noa na wa bɔ no yiye. Now is followed by which one? Se sandy soil no pa ho a deɛɛwɔ he bio na mframa tumi fa mu paa? Afei Theresa.
- 252 Theresa: Black soil
- 253 Tr. : I didn't write black soil on the board. Yes Kofi Danso.
- 254 Danso: Loamy soil.
- 255 Tr. : Say it again
- 256 Danso: Loamy soil.
- 257 Tr. : Yes Appiah.
- 258 Appiah: Loamy soil
- 259 Tr. : Very good. Clap for him
- 260 Chn : [Clapping]
- 261 Tr. : Loamy soil and the last one is what?. The last one is what? Yes Odame.
- 262 Odame: Clay soil.
- 263 Tr. : Clay soil. Now which of the three soils. Now which of the three soils is good for farming? Yes Esther.
- 264 Esther: Roamy soil.
- 265 Tr. : Say it again.
- 266 Esther: Roamy soil.
- 267 Tr. : It is not roamy soil. Say the word properly. Ernestina.
- 268 Ernestina: Loamy soil .
- 269 Tr. : Again.
- 270 Ernestina: Loamy soil.
- 271 Tr. : Very good. Loamy soil. All of you.
- 272 Chn : Loamy soil.
- 273 Tr. : Again.
- 274 Chn : Loamy soil.
- 275 Tr. : Which one is good for modelling? Deɛ ɛwɔ he na yede nwene biribi a eye yiye? Doris.
- 276 Doris: Sand soil.
- 277 Tr. : No. ɛnye sand soil. Yes.
- 278 Chn : Clay soil.
- 279 Tr. : Clay soil. Very good Clay soil. Afei turn to page eight.
- 280 Chn : Turn their pages.
- 281 Tr. : I said soil contains many things. Soil contains many things. Anweɛ wɔhɔ no ɛnnoɔma bebereɛ wom. ɛden nnoɔma saa na mutaa hunu no wɔ anweɛ mu? nnoɔma bɛn saa? Yes Mary.
- 282 Mary: [Inaudible].
- 283 Tr. : Yes Asiedu
- 284 Chn : Sakasaka
- 285 Tr. : They are all animals

- 286 Chn : Ant.
- 287 Tr. : Ant, ant, ant, and what other animals? We have ant. We have what? We have worms. Ant ye be ka ne Twi sen? eye aboa ben a? Osei Agyeman.
- 288 Osei: Ntetea.
- 289 Tr. : Ntetea, okay worm nsoe? Worm, worm, worm. Yes Isaac.
- 290 Isaac : A kɔkono
- 291 Tr. : No. Yes Asamoah
- 292 Asamoah: Kakahe
- 293 Tr. : No Solomon
- 294 Solomon: [No response].
- 295 Tr. : Yes Amoako.
- 296 Amoako: Nwa.
- 297 Tr. : ee, worm nsoe? Aha! Fosu. eyibi wɔ anwee mu. Ntetea ewɔ anwee mu enna deeben bio? Okay dee ben na wo hunu no wɔ wei mu? Anaa se wo hwe mu na ete sen? Yes Olivia.
- 298 Chn : Abosea
- 299 Tr. : Abosea. Wɔse abosea wɔ mu. Gravel ehein! ehe, wo tumi hunu se ey pusee pusee. ehe abosea noa ewo mu no ntiara. But wo hwe wei nsoa enti saa. Wei enti saa. But wei so te saa. enno so ka ho bi. enno nso ka ho bi. enno yetumi hunu no wɔ anwee mu. Now we said that if you spread a soil on the table you can see so man things in it. Example animals, animals, animals and then gravel. And what other things? Yes. Okay go to page ten. There is a diagram there. This is eh, a jar, a water jar. What is in it? What are some of the things in the jar? Can you see in the jar? Yes Odame.
- 300 Chn : Humus
- 301 Tr. : Humus. Clap for him.
- 302 Chn : [Clapping]
- 303 Tr. : What again? Osei Agyeman.
- 304 Chn : Clay in water
- 305 Tr. : Clay in water. Clap for her
- 306 Chn : [Clapping]
- 307 Tr. : What again? Yes

Appendix 5 (43) TL : English

LESSON : FORTY THREE.
SCHOOL : WA-PARA MILITARY PRIMARY
CLASS : P5
SUBJECT: ENGLISH LANGUAGE (READING COMPREHENSION)
TOPIC : AT THE POST OFFICE
TEACHER: TL
DATE : 22ND MARCH, 1996

- 1 Tr. : Stand. Good morning children.
- 2 Chn.: Good morning sir.
- 3 Tr. : How are you?
- 4 Chn.: We are fine. Thank you and you.
- 5 Tr. : I'm also fine. Okay sit down. Today is Friday 22nd. March, 1996. Now we are going to do English Reading. Now the topic is the Post Office. Now take your books. Open at unit three. Now before we start, you have some words which we have to go through. The words are, clerk, all of you.
- 6 Chn.: Clerk.
- 7 Tr. : Again.
- 8 Chn.: Clerk.
- 9 Tr. : Queue.
- 10 Chn.: Queue.
- 11 Tr. : Telegram.
- 12 Chn.: Telegram.
- 13 Tr. : Telegram.
- 14 Chn.: Telegram.
- 15 Tr. : Ordinary.
- 16 Chn.: Ordinary.
- 17 Tr. : Ordinary.
- 18 Chn.: Ordinary.
- 19 Tr. : Whether.
- 20 Chn.: Whether.
- 21 Tr. : Whether.
- 22 Chn.: Whether.
- 23 Tr. : Smiled.
- 24 Chn.: Smiled.
- 25 Tr. : Smiled.
- 26 Chn.: Smiled.
- 27 Tr. : Smiled.
- 28 Chn.: Smiled.
- 29 Tr. : According.
- 30 Chn.: According.
- 31 Tr. : According.
- 32 Chn.: According.
- 33 Tr. : Parcel.

- 34 Chn.: Parcel.
 35 Tr. : Parcel.
 36 Chn.: Parcel.
 37 Tr. : Sorted.
 38 Chn.: Sorted.
 39 Tr. : Sorted.
 40 Chn.: Sorted.
 41 Tr. : Savings.
 42 Chn.: Savings.
 43 Tr. : Again.
 44 Chn.: Savings.
 45 Tr. : Okay. Class stand. Yes start. [Points to list of words on the bb].
 46 Chn.: Clerk, queue, telegram, ordinary, whether, smiled according.
 47 Tr. : According.
 48 Chn.: According.
 49 Tr. : Aha!
 40 Chn.: Parcel.
 51 Tr. : Parcel.
 52 Chn.: Parcel.
 53 Tr. : Parcel.
 54 Chn.: Parcel.
 55 Tr. : [Points to next word on bb].
 56 Chn.: Sorted.
 57 Tr. : Again.
 58 Chn.: Sorted.
 59 Tr. : [Points to next word on bb].
 60 Chn.: Savings
 61 Tr. : Again.
 62 Chn.: Savings.
 63 Tr. : Okay, sit down. Now we all know clerks who work in the Post Office.
 64 Int. : [Noise from the next class]
 65 Tr. : Ah! Wa hunu se egyegye ha paa. Now the clerks word is post, with the post offices. We know a queue, hein?
 66 Chn.: Yes sir.
 67 Tr. : What are queue? What is a queue? Yes Daniel.
 68 Daniel: A line.
 69 Tr. : A line. Very good. Clap for him.
 70 Chn.: [Clapping].
 71 Tr. : We know telegram. Hein? When do we send a telegram? When do we send telegram? When do we send telegram? Yes.
 72 Chd.: ew▷ Pos ▷fisi
 73 Tr. : In English.
 74 Chd.: In the Post Office.

- 75 Tr. : Yes we buy telegrams at the Post Office, and what, eh, when do we send a telegram? Yes who can answer this question? When do we send telegram? Yes.
- 76 Chn.: You, you send telegram to post your letter.
- 77 Tr. : Is telegram the same as ordinary letter? Now when we talk about telegram, eh, eh, when you want to send a message which is very, very important like the death of a person. You go to the Post Office and ask for a telegram form. You fill it and then you send it to the person whom you want him to hear. Is that clear?
- 78 Chn.: Yes sir.
- 79 Tr. : Okay, then ordinary. We have an ordinary letter. Hein, or an ordinary envelope and then we have the special one. Is that clear?
- 80 Chn.: Yes sir.
- 81 Tr. : Good. Now, here, the weather. What is the meaning of this weather? We have two words. The weather of a place, hein?
- 82 Chn.: Yes sir.
- 83 Tr. : You have to say weather. All of you, weather.
- 84 Chn.: Weather.
- 85 Tr. : Weather.
- 86 Chn.: Weather.
- 87 Tr. : and here the atmosphere. You see the weather. The weather condition. Now is it raining or is it shining? At the moment is it raining or the sun is shining? Yes aha.
- 88 Chn.: Shining.
- 89 Tr. : The sun is shining. That means the weather is fine. Is that clear?
- 90 Chn.: Yes sir.
- 91 Tr. : But here when we talk about, the whether, is different from this one. Here is the weather condition. Hein?
- 92 Chn.: Yes sir.
- 93 Tr. : And this one is what we are going to read in our book. The whether. Whether it will rain or not I can't tell. Whether my father will go to Kumasi or not I can't tell. Is that clear?
- 94 Chn.: Yes sir.
- 95 Tr. : Aha, then the word here. Smile. All of you smiled.
- 96 Chn.: Smile
- 97 Tr. : Smiled
- 98 Chn.: Smiled
- 99 Tr. : Ah, when we say smile what does it mean? yes when you hear something which is eh, a good news. You begin to smile. Is that it.
- 100 Chn.: Yes sir.
- 101 Tr. : If you hear a good news you smile at your faces but when you hear bad news what will happen to you? Yes
- 102 Chn.: You cry.
- 103 Tr. : You cry or you squeeze Your face, hein! Is that clear?
- 104 Chn.: Yes sir.

- 105 Tr. : Okay, now look into your books. We are going to read. Unit three. The Post Office. I am going to set the ball rolling. So you listen to me carefully while I read.
- One day Mr. Nyavi the class five teacher told his class, 'Next week we shall visit the Post Office. I have spoken to the Post Master about our visit'. Most of the pupils had never been to the Post Office. Yes who will do the same thing as I have done.
- 106 Chn.: [Talking together].
- 107 Tr. : Yes Eunuch. Stand up and read. Hold the book up. One day Mr. Nyavi the class five teacher told his class, 'Next week we shall visit the Post Office. I have spoken to the Post Master about our visit'. Most of the pupils had never been to the Post Office
- 108 Eunuch: One day Mr. Nyavi the class five teacher told his class, 'Next week we shall visit the Post Office. I have spoken to the Post Master about our visit'. Most of the pupils had never been to the Post Office. The following Wednesday Mr. Nyavi and his class went to the Post Office. Mr Nyavi greeted the Postmaster. The Postmaster said, 'I am, I am happy you've come.
- 109 Tr. : You have come.
- 110 Eunuch: You have come.
- 111 Tr. : Mhum.
- 112 Eunuch: The Postmaster was busy at the time, so he asked one of his, * his clerks to take Mr. Nyavi and his class round. A clerk called Mr Dankwa took them round to see the work people do at the Post Office. Mr. Dankwa took the class to a large hall with some counters. *
- 113 Tr. : Mhum.
- 114 Eunuch: The class saw some people in a line front of a counter.
- 115 Tr. : Yes.
- 116 Eunuch: One of the pupil said, 'Please Mr Dankwa what are the people in the line, queue doing there?' Mr. Dankwa said, 'They, they have come to buy postage stamps.
- 117 Tr. : Yes.
- 118 Eunuch: Do you see the man behind the counter? He sells postage stamps.
- 119 Tr. : Very good. Clap for him.
- 120 Chn.: [Clapping]
- 121 Tr. : Who can continue? Yes Agbovi. Yes, go on.
- 122 Agbovi: Another pupil said, 'Oh I see! This is where we buy stamps for posting letters'. Mr. Dankwa took the class to another counter. they saw telegrams written above the counter.
- 123 Tr. : Mhum
- 124 Agbovi: The people were we*ting
- 125 Tr. : Waiting
- 126 Agbovi: Waiting to send, send telegrams. Mr Dankwa took him at a telegram is a quick.
- 127 Tr. : Ha! Read that portion again.

- 128 Agbovi: Mr Dankwa told took. Mr Dankwa told him at the telegram is a quick ordinary letter. Eh! way of sending, sending a message but it cost more than an ordinary letter.
- 129 Tr. : The word is what? Yes who can say that first word? That word who can say it? Yes Daniel.
- 130 Daniel: Telegram.
- 131 Tr. : No. That word, w-o-r-d.
- 132 Daniel: Ordinary.
- 133 Tr. : All of you.
- 134 Chn.: Ordinary.
- 135 Tr. : Again.
- 136 Chn.: Ordinary.
- 137 Tr. : Yes go on.
- 138 Agbovi: Ordinary letter.
- 139 Tr. : Yes speak louder.
- 140 Agbovi: Ordinary letter.
- 141 Tr. : Ordinary
- 142 Agbovi: Ordinary letter!
- 143 Tr. : Ya
- 144 Agbovi: They moved to another part of the Post Office were, where
- 145 Tr. : Now is it where or, yes what is that word? Yes Atuahene.
- 146 Atua: There
- 147 Tr. : There. Mhum.
- 148 Agbovi: There.
- 149 Tr. : Speak louder
- 150 Agbovi: There they saw a man in a telephone booth.
- 151 Tr. : Mhum.
- 152 Agbovi: He speak. He was speaking on the telephone.
- 153 Tr. : Very good
- 154 Agbovi: He telephone in the bow, booth. a pupil asked Mr Dankwa whether anybody could use the telephone at the Post Office. Oh yes, said Mr. Dankwa. 'Anybody can use the telephone but he must pay for it'. The pupil smiled and said one day he word speak.
- 155 Tr. : He! One day!
- 156 Chn. : One day he were speaking to his
- 157 Tr. : One day, read the portion again.
- 158 Agbovi: One day. He word
- 159 Tr. : He! yes what is the word? Yes Eunuch.
- 160 Eunuch: Wold.
- 161 Tr. : Hε!
- 162 Eunuch: He wull.
- 163 Tr. : How do you say it well? Yes w-o-u-l-d. How do you say this word? Yes
- 164 Chd.: Weld.
- 165 Tr. : Yes Isaac
- 166 Chn.: Would.
- 167 Tr. : /wou'd/ all of you.

- 168 Chn.: Would.
- 169 Tr. : Again.
- 170 Chd.: Would.
- 171 Tr. : Yes go on
- 172 Agbovi: One day he would speak to his friends in Kumasi on the telephone.
- 173 Tr. : Very good. Clap for her.
- 174 Chn.: [Clapping].
- 175 Tr. : Who again will continue? Yes Daniel
- 176 Daniel: Then Mr Dankwa took the class to the sorting office. There, they saw a high pile of letters. There were also a number of sorters at work. They were sorting the letters. They were arranging the letters according to the addresses. The sorters also checked all letters to make sure that they have the right amount of postage stamps on them. They also stamp the letters with date stamp to show when the letters leave the post office. The pupils
- 177 Tr. : Speak louder.
- 178 Chn.: The sorters also checked the letters to make sure that they also. That they have the right amount of postage stamps on them. They also stamp the letters with date stamp to show when the letters leave the post office. The pupils
- 179 Tr. : Michael, book, you book down and then. Yes go on.
- 180 Daniel: The pupils saw other sorters. They were sorting letters which had come from other places. They put them in different post office boxes for the owners to take away later. Mr. Nyavi asked one of the sorters. 'What about those who have no post office boxes?' How do they get their letters?
- 181 Tr. : Very good. Clap for him.
- 182 Chn.: [Clapping].
- 183 Tr. : Yes who will continue?
- 184 Chn.: [Talking together].
- 185 Tr. : Isaac. You must look into your book when a friend is reading.
- 186 Isaac: The sorter said we have
- 187 Tr. : Raise the book up. Raise it up.
- 188 Chn.: The sorter said, 'We have postmen. They take such letters to the addresses written on them. postmen know the town very well and they know where to find the owners'. The class had not been to the parcel section and the savings bank section. But section, but section, but it was but it was time for them to go home. Mr Nyavi thanked Mr Dankwa and the Postmaster and they left the post office. The pupils were happy that they had learnt many new things about the post office.
- 189 Tr. : Very good. Clap for him.
- 190 Chn.: [Clapping]
- 191 Tr. : Now, we have now come to the end of the passage. Now we are going to answer the questions that follows. As you all heard what your friends read about the passage. Now question one. What is the name of the class teacher? This time I want all of you because you were all there when the reading was going on. Yes Noble.
- 192 Chn.: He is Mr. Nyavi.

- 193 Tr. : He is Mr. Nyavi. No. I want you to answer. What is the name of the class teacher? Yes Michael.
- 194 Michael: The name of class teacher is Mr. Nyavi.
- 195 Tr. : Again.
- 196 Michael: The name of class teacher is Mr. Nyavi.
- 197 Tr. : Now he is saying the name of the class teacher is Mr Nyavi. Eh, he has omitted a word. It should be what? Yes
- 198 Chd.: The name of the class teacher is Mr. Nyavi.
- 199 Tr. : As you read from the passage the name of the class teacher was Mr Nyavi. Now question two. What did the teacher tell the class one day? Here I have used the verb tell but when you are answering the question you must change it to past. Eh, What did the teacher tell the class one day? Yes Eunuch.
- 200 Chn.: The teacher told his class that next week we shall visit to the post office
- 201 Tr. : Again
- 202 Chn.: The teacher told his class that next week we shall visit the post office
- 203 Tr. : Very good. Clap for him.
- 204 Chn.: [Clapping].
- 205 Tr. : You see the teacher told his class, 'Next week we shall visit the post office. so the children became happy. Why? Because. Who can tell us? They became very happy. Why because
- 206 Chd.: Because they had never been at the post office
- 207 Tr. : Again
- 208 Chn.: Because they never. They had never been to the post office.
- 209 Tr. : Very good. They had never been to the post office. You see.
- 210 Chn.: Yes sir.
- 211 Tr. : The children were very happy because some of them had never been to the post office before. So it was their first experience. Their first visit. So they became very happy. Very good. Now question three. Where was the post office? According to the passage where was the post office? Yes you. Where was the post office?
- 212 Chn.: The post office was in Kumasi.
- 213 Tr. : Are you sure? Where was the post office? You, yes.
- 214 Chn.: The post office was in Kumasi.
- 215 Tr. : Are you sure? [laughs] Yes Esther. They are telling us the post office was in Kumasi. Yes.
- 216 Chn.: The post office is in Kumasi.
- 217 Tr. : Very good. Clap for them.
- 218 Chn.: [Clapping].
- 219 Tr. : Yes, according to the passage the post office was in Kumasi. Very good. Now question four. Who took the. Who took Mr. Nyavi and his class round when they went to the post office? Who took Mr. Nyavi and his class round when they went to the post office? Yes Abrafi are you going to tell us something?
- 220 Abrafi: Mr. Dankwa.

- 221 Tr. : Mr. Dankwa. No, in a full sentence. Yes Isaac.
- 222 Chn.: The man who took Mr. Nyavi and his class around is called Mr Dankwa.
- 223 Tr. : Okay, Mr. Dankwa being the man at the post office, he took Mr. Nyavi and his class around the post office. Is that clear?
- 224 Chn.: Yes sir.
- 225 Tr. : Now who can tell me what was the work of Mr. Dankwa according to the passage. What was the work of Mr. Dankwa? Yes Daniel.
- 226 Chn.: He was a clerk.
- 227 Tr. : He was a clerk. Clap for him.
- 228 Chn.: [Clapping].
- 229 Tr. : Now, why is it that the postmaster eh, refused to go round with Mr Nyavi? Instead he asked Mr Dankwa to go round with the class. Yes.
- 230 Chn.: At that time he was busy
- 231 Tr. : Very good. Clap for him.
- 232 Chn.: [Clapping].
- 233 Tr. : The postmaster was busy and therefore asked Mr. Dankwa being his clerk, one of his clerks to send them round at the post office. Is that clear?
- 234 Chn.: Yes sir.
- 235 Tr. : Very good. Clap for yourselves.
- 236 Chn.: [Clapping]
- 237 Tr. : Now question
- 238 Chn.: Wa gyae question four.
- 239 Tr. : Five. What was the clerk at the first counter doing? What was he doing? The clerk at the first counter. What was he doing. Yes all of you read the passage. Tell me what work you think the clerk at the first counter was doing. Some of the girls are not trying to raise up their hands. I want you to take part. Yes Margaret tell us.
- 240 Margaret: They buy postage stamps.
- 241 Tr. : Who was buying postage stamps?
- 242 Chd.: The people
- 243 Tr. : Was he buying or * yes. Was the first clerk buying or selling? Yes. Atuahene. What was he doing. The first clerk at the counter.
- 244 Atua.: Forget
- 245 Tr. : [Laughs] You have forgotten. Yes eh.
- 246 Chn.: They buy postage stamps
- 247 Tr. : I mean the clerk. What was he doing? The clerk.
- 248 Chd.: The clerk was sell postage stamps
- 249 Tr. : Very good. The first clerk, all of you.
- 250 Chn.: The first clerk
- 251 Tr. : Was selling postage stamps.
- 252 Chn.: Was selling postage stamps.
- 253 Tr. : Good, very good. This showed that most of you followed the reading when we were doing it. Now question six.? What was the man in the telephone booth doing? What was the man in the telephone booth doing? Yes Isaac.

- 254 Isaac: He is
- 255 Tr. : What was? So the answer should be what?
- 256 Isaac: He was, he was speaking at the booth.
- 257 Tr. : Can you show me in the passage where the man was speaking?
- 258 Isaac: Here [Pointing to the picture in the text book].
- 259 Tr. : No. I mean the sentence which showed that he was speaking. Where is it? Mhum. Read that line and lets hear you. Take the book and read. That you know the actual place.
- 260 Isaac.: The, they saw a man in
- 261 Tr. : Speak louder.
- 262 Isaac: A telephone booth.
- 263 Tr. : Mhum.
- 264 Isaac: He was speaking on the telephone in the booth.
- 265 Tr. : Very good. Clap for him.
- 266 Chn.: [Clapping].
- 267 Tr. : You see the man was speaking to someone somewhere in the booth. Is that clear?
- 268 Chn.: Yes sir.
- 269 Tr. : Then the seventh question. What was the last place the clerk went to? What was the last place the clerk went to? At that place they were ending their visit. Yes, who can tell us? Yes Mabel. What was the last place? Yes, can you tell us?
- 270 Mabel: No sir.
- 271 Tr. : Yes. Who can tell us? The last place the class visit. It is there in the passage. Yes Esinam.
- 272 Esinam: The last place the clerk went is the sorting office.
- 273 Tr. : The sorting office. Very good Clap for him.
- 274 Chn.: [Clapping].
- 275 Tr. : You see they went to the sorting office. It was the last place they visit. Then lets see the last section.
- 276 Int. : Noise from the next class.
- 277 Tr. : Which two sections could the class not visit? Which two sections did the class fail to go or did not visit? Yes, which two sections could the class not visit? They were not able to go to that place because their time was up. You see. What were the two sections? Yes Anane. What were the two sections?
- 278 Int. : Noise from the next class.
- 279 Tr. : Most of you are not trying. Mhum. Yes Abrafi.
- 280 Chn.: Is about the Post Office.
- 281 Tr. : No. Where were the two sections the class refused to go because their time was up? Yes Isaac.
- 282 Chn.: [Talking together].
- 283 Tr. : They refused to go.
- 284 Isaac: Parcel section and savings section
- 285 Tr. : Very good. Clap for him.
- 286 Chn.: [Clapping].

- 287 Tr. : You see because their time was up they were not able to visit the parcel section and the savings bank. So they left with their teacher Mr. Nyavi and then they returned to their school. Very good. Clap for yourselves.
- 288 Chn.: [Clapping].
- 289 Tr. : Now we are going to write what we have discussed. The comprehension. We are going to write them into our exercise books. Is that clear?
- 290 Chn.: Yes sir.
- 291 Tr. : Okay, now bring up the exercise books. Hurry up. You have the books. I am not going to write the questions on the board. You are going to answer questions one to five, hein! So when you get your exercise book begin to write down the answer. Question one you read from the passage. Eh, the course book then you answer. Is that clear?
- 292 Chn.: Yes sir.
- 293 Tr. : You can share them. Boadu Kwame, Afia Serwah, Afia Serwah share them up.
- 294 Boadu + Afia: [Distributing pupils' exercise books].
- 295 Tr. : Hurry up.
- 296 Boadu + Afia: [Distributing pupils' exercise books].
- 297 Tr. : As soon as you get your book write down your date. Hurry up and then write your name. Then you have to write the post office at the top
- 298 Boadu + Afia: [Distributing pupils' exercise books].
- 299 Tr. : Hurry up and sit down. Have you all received your exercise books? Write down today's date, write your name, then answer the questions from your course book. Numbers one to five.
- 300 Chn.: [Working and talking. Together].
- 301 Tr. : Stop work. You can look from the board then you can complete your sentence. Number one. The name of the class teacher is * Then you put it down. Number two. The teacher told his class that they were * Then you continue. Number three. The post office was in. Then number four. Mr. * took Mr. Nyavi and his class. Have you seen it?
- 302 Chn.: Yes sir.
- 303 Tr. : Okay number five. The clerk at the first counter was selling * Then you continue. Hurry up. You search from your course book and you get the answers.
- 304 Chn.: [Working].
- 305 Tr. : It is almost time. It is almost time. You must write very fast. Sit down and then. What are you doing? Is not fair. That was what I was telling you. You must write them in groups.
- 306 Chn.: [Working].
- 307 Tr. : You must finish one before you go to the other.
- 308 Chn.: [Working].
- 309 Tr. : Where is the answer for number two?
- 310 Chn.: [Working].

Appendix 5 (44) TL: Science

LESSON : FORTY FOUR.
SCHOOL : WA PARA MILITARY PRIMARY
CLASS : P5
SUBJECT: ELEMENTARY SCIENCE
TOPIC : REFLECTED LIGHT
TEACHER: TL
DATE : 21ST. MARCH, 1996

- 1 Tr. : Children today we have elementary science and we are going to learn something about light. First let us close our doors.
- 2 Chn.: [Close doors and windows]
- 3 Tr. : Close the other one.
- 4 Chn.: [Talking together].
- 5 Tr. : Now, children what can you see now? Yes what can you see? Yes who can tell us? Yes Isaac. Now what can you see at the moment? Yes when the doors are closed, the windows are all closed. What can you see?
- 6 Chn.: Aha a ye sum.
- 7 Tr. : Yes what do you call it in English? Yes, you see the room is dark. Dark, all of you, the room is dark.
- 8 Chn.: The room is dark.
- 9 Tr. : Ah! So at the moment, when I ask you to read. Can you read from your ex, from your books?
- 10 Chn.: Yes sir.
- 11 Tr. : Can you read?
- 12 Chn.: Yes sir.
- 13 Tr. : Now, who can read now by using the darkness to read. Can you read?
- 14 Chd.: Yes sir.
- 15 Tr. : You can't read. Are you sure you can read?
- 16 Chn.: Yes sir.
- 17 Tr. : Yes, when the room is too dark can you read?
- 18 Chd.: No sir.
- 19 Tr. : You can't read. Yes, at the moment what do you need? Yes you need what? You need light. Therefore open the windows and lets see if we can get light. Open the windows.
- 20 Chn.: [Open windows and doors].
- 21 Tr. : Now when the doors and windows were closed you were not able to see clearly. Have you seen it?
- 22 Chn.: Yes sir.
- 23 Tr. : Now, at the moment, the doors and the doors and the windows are all open. What can you see now? Yes what can you now? Isaac.
- 24 Isaac: You can see light.
- 25 Tr. : You can see light. Very good. Clap for him.
- 26 Chn.: [Clapping].

- 27 Tr. : That means we need light to do so many things. Light is very, very important in all aspects. When it is dark we find it very difficult to do our things. But when there is light we find it very easy to do everything. That means we need what? Light. We need light to see. Now, why do you need light? why do you need light? Apart from seeing what are some of the things that we need light for? Yes.
- 28 Chn.: We need light to cook.
- 29 Tr. : What?
- 30 Chn.: Cook
- 31 Tr. : Can you use light to cook? Light, now when we say light what does that mean? When the doors were closed the room was dark. Ha?
- 32 Chn.: Yes sir.
- 33 Tr. : But now the light is on. So we need light to do what? Yes.
- 34 Chd.: We need light to learn.
- 35 Tr. : To do what? To
- 36 Chd.: Learn.
- 37 Tr. : To learn. Very good. Without light we cannot learn very well. You see. Yes, what again?
- 38 Chd.: To go.
- 39 Tr. : To go where? That means we can move well when there is light. Good. Yes aha. Okay, now in our daily live we need light to do so many things. So today we are going to study more about what? Light. Now, what are the sources of light? What are some of the sources of light? Yes.
- 40 Chd.: Sun.
- 41 Tr. : Sun. Very good. Clap for him.
- 42 Chn.: [Clapping].
- 43 Tr. : Yes, what about you?
- 44 Chd.: Torch.
- 45 Tr. : Yes when the torch is live we can see light. Yes.
- 46 Chd.: Car.
- 47 Tr. : Again.
- 48 Chd.: Car.
- 49 Tr. : Car light. Yes, aha, what else?
- 50 Chd.: Firewood.
- 51 Tr. : Very good. Clap for him.
- 52 Chn.: [Clapping].
- 53 Tr. : You see when we prepare fire, hein? We can see the light, especially during the night. Very good. Yes.
- 54 Chd.: Day.
- 55 Tr. : Again.
- 56 Chd.: Day.
- 57 Tr. : Day. The source of light. Somebody said firewood. So what will be the next source of light?
- 58 Chd.: Motor-bike.
- 59 Tr. : Yes, again
- 60 Chd.: Motor-bike.

- 61 Tr. : Motor-bike. Yes motor-bike also has light. What else?
- 62 Chd.: Lantern
- 63 Tr. : Again.
- 64 Chd.: Lantern.
- 65 Tr. : Lantern. All of you.
- 66 Chn.: Lantern.
- 67 Tr. : As you normally call the lamp. Hein! During the night. Now when do you use the lamp? When do you use the lamp? Yes.
- 68 Chd.: We use the lamp to sleep.
- 69 Tr. : When do you use the lamp?
- 70 Chd.: We use lamp to sleep.
- 71 Tr. : I mean when do we use the lamp? During the day or during the night? Yes.
- 72 Chd.: During the night.
- 73 Tr. : Very good. During the night. All of you.
- 74 Chn.: During the night.
- 75 Tr. : Good. Now, it is said that we need light to see. Very good, and the light we see comes from the sun. It is also one of the main source of what? Light in the day and the lamp at night. Is that clear?
- 76 Chn.: Yes sir.
- 77 Tr. : During the day we see the sun and during the night there is darkness. So we don't see the sun well. Is that clear?
- 78 Chn.: Yes sir.
- 79 Tr. : We have now known some of the sources of light. Yes. Who can tell me why? We said. Yes any source of light? Aha.
- 80 Chd.: Sun.
- 81 Tr. : The sun. Good. What else? Yes.
- 82 Chd.: Torch
- 83 Tr. : The torch light. This one that we have brought. Hein? Is also a source of light. What can you see? Can't you see light?
- 84 Chn.: Yes sir.
- 85 Tr. : Yes is also source of light. What else? Aha.
- 86 Chd.: Car light.
- 87 Tr. : Again.
- 88 Chd.: Car light
- 89 Tr. : Car light. Mhum. What else?
- 90 Chd.: Bicycle light.
- 91 Tr. : Bicycle light. What else?
- 92 Chd.: Firewood.
- 93 Tr. : Very good. Clap for him.
- 94 Chn.: [Clapping].
- 95 Tr. : As he has said already, these are some of the sources of what? Light. Is that clear?
- 96 Chd.: Yes sir.
- 97 Tr. : Okay. Now, let us see this experiment. When I throw a ball against a wall what happens? [Throws a ball against the blackboard wall

and catches it as it bounces back]. What happens when you throw a ball against a wall? What happens? Yes, what happen? Yes what do you see?

98 Chd.: It jumps

99 Tr. : Ha? It does what?

100 Chd.: It jumps

101 Tr. : Does it jump? Now look. [Throws the ball against the wall] Hein. When I threw. Let me have the ball. When the ball was thrown, hein, against the wall like this.[Again throws]. It does what?

102 Chd.: It comes back.

103 Tr. : It comes back. Have you seen it?

104 Chn.: Yes sir.

105 Tr. : Ahaa, so this is what we are going to do with our light. That is the torch light. All of you torch light.

106 Chn.: Torch light.

107 Tr. : Torch light.

108 Chn.: Torch light.

109 Tr. : We call this torch

110 Chn.: [Talking together]

111 Tr. : Because we get light from this we have added light to it. Is that clear?

112 Chn.: Yes sir.

113 Tr. : So we call it torch light. All of you.

114 Chn.: Torch light.

115 Tr. : Ahaa! This is the torch light. Now, this works the same way as the ball which was thrown against the wall. Fausty look at me. This ball works the same as. The torch light works the same as, the same as what? The ball that was thrown against the ball, eh the wall. Is that clear?

116 Chn.: Yes sir.

117 Tr. : Now we are going to see the experiment now.

118 Chn.: [Talking together].

119 Tr. : Close the door for me. Hurry up.

120 Chn.: [Close doors and windows]

121 Tr. : Now you look at the board. I am going to use the torch light and the mirror. All of you mirror.

122 Chn.: Mirror.

123 Tr. : Mirror.

124 Chn.: Mirror.

125 Tr. : Han! We all know mirrors in our various homes. The mirror.

126 Chn.: [Talking together].

127 Tr. : Mirror, all of you.

128 Chn.: Mirror.

129 Tr. : spell mirror.

130 Chn.: /M-i-double, r-o-r/, mirror.

131 Tr. : Any time you are spelling a word, you have to say it before you spell. Is that clear?

132 Chn.: Yes sir.

133 Tr. : So spell mirror.

- 134 Chn.: Mirror,/ m-i-r-r-or/, mirror.
- 135 Tr. : Okay, this is a mirror. All of you this is a mirror.
- 136 Chn.: This is a mirror.
- 137 Tr. : Now what do you use this mirror for? Who can tell us? What's the use of this mirror? Atuahene.
- 138 Atua.: For see for your face.
- 139 Tr. : Again. Say what you said. Aha!
- 140 Atua.: For see for your face.
- 141 Tr. : [Laughs] For see for your face? Yes. Ahein.
- 142 Chd.: We use mirror to see your face
- 143 Tr. : See our face. You see, when you want to make sure you have dressed properly. Hein? You use mirror to find out that things are in good order before you come to school. Is that clear?
- 144 Chn.: Yes sir.
- 145 Tr. : After bathing you use the mirror to see your face. Now we are going to use this mirror and the torch to work out the ball which was thrown against a wall. so come. Hurry up.
- 146 Chn.: [Move closer to the teacher and the blackboard].
- 147 Tr. : Stand here. Stand here. Stand here. Hold the mirror for me. Aha hold it. Okay. now, look at Rita. Hold this door well for me.
- 148 Chn.: [Talking together].
- 149 Tr. : Go and hold it. Now even if I hold it, hein? And I throw this torch, like this.[Flashes the light from the torch onto the mirror]
- 150 Chn.: Watch and listen.
- 151 Tr. : Now what do you see from. Close the door.
- 152 Chd.: [Rushes to hold the door close].
- 153 Tr. : What do you see at the board. What do you see?
- 154 Chd.: Light.
- 155 Tr. : You see what?
- 156 Chn.: Light.
- 157 Tr. : Ahaa, you see! Go and sit down.
- 158 Chn.: [Move to their seats].
- 159 Tr. : When I throw this torch light at the mirror. Isaac, hurry up and sit down. Is okay. When I throw it against it like this, hein! [Flashes torch light unto mirror]. What do you see at the wall? Yes.
- 160 Chn.: Light.
- 161 Tr. : You can see the light. Have you seen it?
- 162 Chn.: Yes sir.
- 163 Tr. : Ahaa! This light we call it reflected light. All of you.
- 164 Chn.: Reflected light.
- 165 Tr. : Again
- 166 Chn.: Reflected light.
- 167 Tr. : Ha? We call it reflected light.
- 168 Chn.: [Talking together].
- 169 Tr. : Reflected light. All of you.
- 170 Chn.: Reflected.

- 171 Tr. : Good. Now the light has been reflected when the torch was used. Hein? On the mirror. It reflect on the wall. So when the ball was also thrown we saw what happened. Hein! When the ball was thrown against the wall. Have you seen it?
- 172 Chn.: Yes sir.
- 173 Tr. : It comes back. The ball was thrown back. So this is called reflected light. All of you.
- 174 Chn.: Reflected light.
- 175 Tr. : Good. When we used the torch, that's the torch, you call it reflected light. But when we use the ball we don't call it reflected light. What do we call it? Yes, we call it what?
- 176 Chd.: Come back.
- 177 Tr. : Hein?
- 178 Chd.: It comes back.
- 179 Tr. : By the way it was thrown. How do we call it?
- 180 Chd.: Reflected ball.
- 181 Tr. : Reflected ball or we shall call it reflection. All of you reflection.
- 182 Chn.: Reflection.
- 183 Tr. : Or in short you say reflected.
- 184 Chn.: [Talking together].
- 185 Tr. : Reflected, all of you reflected.
- 186 Chn.: Reflected.
- 187 Tr. : Anytime you throw a ball against a wall it will by all means come back to you. Have you seen it?
- 188 Chn.: Yes sir.
- 189 Tr. : Aha, reflected and when the torch light was thrown at a mirror, any shinning face. Any what?
- 190 Chn.: Any shinning face.
- 191 Tr. : You will get a reflected light. Is that clear?
- 192 Chn.: Yes sir.
- 193 Tr. : Okay, open the doors and windows. Hurry up.
- 194 Chn.: Open the doors and windows.
- 195 Tr. : Now, let us see if you can get eh, two items to show which of them is the best reflector. The mirror and what is this? Yes.
- 196 Chd.: Bottle.
- 197 Tr. : A bottle. Lets see the mirror and what?
- 198 Tr+Chn.: The bottle.
- 199 Tr. : Which is the best or the better reflector? Now
- 200 Chd.: wǝse den?
- 201 Tr. : Even during the day when the torch is throw on the mirror, it will by all means reflect. Hein?
- 202 Chn.: Yes sir.
- 203 Tr. : It will reflect. You will see the light somewhere. Hein! [demonstrates]. Have you seen it?
- 204 Chn.: Yes sir.
- 205 Tr. : Can't you see the light here?
- 206 Chn.: Yes sir.

- 207 Tr. : When it is thrown on the mirror, when it is thrown at the mirror you will by all means see the light on the board. Can you see it?
- 208 Chn.: Yes sir.
- 210 Tr. : Who can show the light which has been thrown on the mirror? Yes, Rita come and show us Where is it? Where? Will you show the position?
- 211 Chn.: [Points to the sport on the bb].
- 212 Tr. : Good. Have you seen it?
- 213 Chn.: Yes sir.
- 214 Tr. : Ahaa! So we call it reflected light. All of you.
- 215 Chn.: Reflected light.
- 216 Tr. : Now, this is the mirror. The work of the mirror. What about a glass? Lets see the glass. Can you see it?
- 217 Chn.: No sir.
- 218 Tr. : You cannot see it. Now lets see eh, this bottle. If we can find the light on the board. Can you see it?
- 219 Chn.: No sir.
- 220 Tr. : Good. So with these three objects which one would you say is a best reflector? Yes
- 221 Chd.: Mirror.
- 222 Tr. : The mirror. The mirror would be described as what? The best reflector.
- 223 Chn.: [Talking together].
- 224 Tr. : All of you. The mirror is the best reflector.
- 225 Chn.: The mirror is the best reflector.
- 226 Tr. : Reflector.
- 227 Chn.: Reflector.
- 228 Tr. : Who has ever seen a reflector some where? When we say something is a reflector, as a mirror, when a light is thrown on it is reflected. Have you seen it?
- 229 Chn.: Yes sir.
- 230 Tr. : Any reflector?
- 231 Chd.: Car light.
- 232 Tr. : Car light. Okay, now at times what happens to the light when it is thrown?
- 233 Chd.: Is a reflector
- 234 Tr. : Is a reflector. The light. Yes.
- 235 Chn.: The light comes back to you.
- 236 Tr. : Again.
- 237 Chn.: The light comes to you.
- 238 Tr. : Comes to you
- 239 Chn.: Yes sir.
- 240 Tr. : Now at times when you see a car coming, hein, the light is thrown on you. Hein?
- 241 Chn.: Yes sir.
- 242 Tr. : But a car, human body is not a reflector. Are you a reflector?
- 245 Chn.: No sir.

- 246 Tr. : But when a car is moving with two cars they have got some em, eh, some, what we call reflectors at the back of the car so that as soon as light is thrown on it, it will by all means reflect. That it will tell the driver that there is a car behind him. Is that clear?
- 247 Chn.: Yes sir.
- 248 Tr. : Aha, so we have got reflectors at the back and ahaa sometimes at the edges of the car. Is that clear.
- 249 Chn.: Yes sir.
- 250 Tr. : Very good. Now the next thing is called transparent. All of you transparent.
- 251 Chn.: Transparent
- 252 Tr. : What is a transparent? Now
- 253 Chn.: [Talking together].
- 254 Tr. : We have water and then glass. This is a glass. Have you seen it?
- 255 Chn.: Yes sir.
- 256 Tr. : Aha, now as you all know, we said glass and water are transparent. When light is thrown, hein, you can see down there. [demonstrates].
- 257 Chn.: [Watch and listen].
- 258 Tr. : Have you seen it? Thus the base of the basin can be seen. Can you see it?
- 259 Chn.: Yes sir.
- 260 Tr. : Ahaa! Now what about this one? Can't you see it?
- 261 Chn.: Yes sir.
- 262 Tr. : Good. When I put light, hein, like this, you can see the light. coming outside, hein?
- 263 Chn.: Yes sir.
- 264 Tr. : So we say the glass is what? A transparent object. All of you transparent.
- 265 Chn.: Transparent.
- 266 Tr. : Transparent.
- 267 Chn.: Transparent.
- 268 Tr. : Aha, I want some of you to come and then observe because you cannot just sit there and then say transparent without being eh, taking part. So I want you to come and see what I am talking of. Come and see. Hurry up. bean observer.
- 269 Chn.: [Some pupils move to the teachers table in front of the class].
- 270 Tr. : You see when I throw the torch.[demonstrates]. Can you see down? Okay, the base of the basin. Can you see it? Aha. Come and see. What about this one? You can see it. Now, even without the torch you can see that the basin eh, the base of the glass. Hein! Ah, what about this one? Can you see it? Aha, so we say the glass and what?
- 271 Tr+Chn: The basin.
- 272 Tr. : That's water, glass and water, all of you.
- 273 Chn.: Glass and water.
- 274 Tr. : Glass and water.

- 275 Chn.: Glass and water.
- 276 Tr. : Aha. These two objects are what? Transparent. Now we have transparent objects like this one. Go and sit down. What is this?
- 277 Chn.: Net
- 278 Tr. : What is this?
- 279 Chn.: Net
- 280 Tr. : Ha?
- 281 Chn.: Net.
- 282 Tr. : Is it net?
- 283 Chn.: No
- 284 Tr. : Is called what?
- 285 Chn.: Lace.
- 286 Tr. : Yes we call it lace. All of you.
- 287 Chn.: Lace.
- 288 Tr. : Why is it call lace? Why do you call it lace? Yes Isaac.
- 289 Isaac: [Inaudible].
- 290 Tr. : Ha?
- 291 Isaac: [Inaudible].
- 292 Tr. : Now we said this is transparent because when you look through can't you see.
- 293 Chn.: Yes sir
- 294 Tr. : Yes, now look at it. Take it and hold it. Hold the material.
Som. Aha can you see the teacher?
- 295 Chd.: Yes
- 296 Tr. : [Give material to another child].What about you? Take it and look outside and see whether you can see the trees.
- 297 Chd.: I can see the trees.
- 298 Tr. : Can you see the trees?
- 299 Chd.: Yes sir.
- 300 Tr. : Very good. So we call this as what? A transparent object. All of you.
- 301 Chn.: A transparent object.
- 302 Tr. : Very good. Back to the glass. Why do we call this a transparent? because we can see what is inside. Hein?
- 303 Chn.: Yes sir.
- 304 Tr. : What is inside? Yes.
- 305 Chn.: Water.
- 306 Tr. : The water is inside. Now is there any water?
- 307 Chn.: No sir.
- 308 Tr. : Good. Some objects are not transparent. Look at this one, hein.
- 309 Chn.: Yes sir.
- 310 Tr. : What is this?
- 311 Chn.: Glass.
- 312 Tr. : Is also a glass. Can you say is also a transparent?
- 313 Chn.: No
- 314 Tr. : Mm What is inside?

- 315 Chn.: Water.
- 316 Tr. : At the moment you can tell me is, is water, isn't it?
- 317 Chn.: Yes sir.
- 318 Tr. : Now let us see. Look at this bottle. What is inside?
- 319 Chn.: No sir.
- 320 Tr. : You will find it very difficult to know that there is something inside because this one is coloured. Have you seen it?
- 321 Chn.: Yes sir.
- 322 Tr. : But this white glass is easily seen that there is nothing. It's empty. It's what?
- 323 Chn.: Empty.
- 324 Tr. : It's empty. There is nothing inside. But when I put water you will by all means see the object which has been put in it, isn't it?
- 325 Chn.: Yes sir.
- 326 Tr. : Yes, good. That's why we say glass is a transparent object. The same thing applies to this lace. It's transparent because you see clearly when you look through. Is it clear?
- 337 Chn.: Yes sir.
- 338 Tr. : Aha. That's why we say it is transparent. Now, lets see. Now look at this. Read from the board if you can read something. Can you read something?
- 339 Chn.: No sir.
- 340 Tr. : Good. So this material and this. Which one will you say is transparent? Yes Boakye.
- 341 Boakye: Net.
- 342 Tr. : The.
- 343 Boakye: Lace.
- 344 Tr. : The lace. Is that clear? Is that clear?
- 345 Chn.: Yes sir.
- 346 Tr. : That means this not transparent. This is what?
- 347 Chn.: Transparent.
- 348 Tr. : We call it transparent object. All of you.
- 349 Chn.: Transparent object.
- 350 Tr. : Okay. Now before we come to the end of the lesson, what are some of the things that we can, we can remember. Why do you need light? Yes. Why do you need light? Yes.
- 351 Chn.: We need light to see.
- 352 Tr. : Very good. Clap for him.
- 353 Chn.: [Clapping].
- 354 Tr. : Today we have learnt that we need light to see, because without light we cannot see. Is that clear?
- 355 Chn.: Yes sir.
- 356 Tr. : Good. What are some of the sources of light? What are some of the sources of light? That will help you to see. Yes Boakye.
- 357 Boakye: Torch.
- 358 Tr. : The torch. Very good. What else? Yes

- 359 Chd.: The sun.
- 360 Tr. : The sun. What else? You.
- 361 Chd.: Firewood.
- 362 Tr. : The firewood. Aha Michael do you have something to say?
- 363 Michael: The car.
- 364 Tr. : The car, the car light. Hein. Not only the body of the car but the car light will help you to see during the night. Yes Kubi
- 365 Kubi: Motor light.
- 366 Tr. : The motor light. Yes Isaac.
- 367 Isaac.: The lantern.
- 368 Tr. : The lantern. It is normally called the lamp. All of you the lamp.
- 369 Chn.: The lamp.
- 370 Tr. : Very good. Put your hands down. Clap for yourselves.
- 371 Chn.: [Clapping].
- 372 Tr. : Now, when we refer to our book we have a lot of things to learn. First, Eunuch read for us and lets see eh.
- 373 Eunuch: We have light to see. The light we see comes from the sun in the day or from the lamp in the night.
- 374 Tr. : Mhum
- 375 Eunuch: When, when light, when light tries.
- 376 Tr. : Hit.
- 377 Eunuch: Hit an object some of it is thrown back.
- 378 Tr. : Very good. Stop there. As I have already discussed with you, when light hit an object, some of it, some of it is thrown back. Now when the torch light was thrown at the object of what? a mirror. What happened? yes what happened to the mirror? Yes the light was thrown back. The same thing like what? The same thing like what?
- 379 Chd.: The ball.
- 380 Tr. : The ball . Very good. Now as you all know when the ball was thrown at the wall, hein, like this [demonstrates with the ball] It comes back. So the same thing applies to what? The light which was thrown at what? The mirror. we saw the light on the board and what was the name of that? Who can tell us? The name of this.
- 381 Chd.: Reflected.
- 382 Tr. : Reflected light, all of you.
- 383 Chn.: Reflected light
- 384 Tr. : Again.
- 385 Chn.: Reflected light
- 386 Tr. : Ahaa, when it was thrown back we had reflected light. Is that clear?
- 387 Chn.: Yes sir.
- 388 Tr. : Go on.
- 389 Eunuch: The light which was thrown back is said to be reflected
- 390 Tr. : Very good. It's said to be reflected. Mhum.
- 391 Eunuch: This is liken to what is going to happen when you throw a ball against a wall.

- 392 Tr. : Very good. That means it happens the same as when a ball is thrown at what? A wall. Is that clear?
- 393 Chn.: Yes sir.
- 394 Tr. : Very good. Go on. So what can you see from the picture? Yes what? What can you see from the picture? What is happening? Yes Isaac.
- 395 Isaac: You can see two boys throwing a ball.
- 396 Tr. : Very good. You see the boys are throwing ball against what? Wall and what, what, will tell you. What will you learn from this eh activity or from this picture? Yes
- 397 Chd.: Throw back.
- 398 Tr. : Throw back? The word which has been used is called. Yes the word which has been used is called.
- 399 Chn.: [Talking together].
- 400 Tr. : Yes, which word was used when a ball was thrown at a wall and it came back. What?
- 401 Chd.: Reflector.
- 402 Tr. : Reflect. Yes.
- 403 Chd.: Reflector.
- 404 Tr. : Is not reflector but what?.
- 404 Chd.: Reflected.
- 405 Tr. : Reflected. All of you.
- 406 Chn.: Reflected.
- 407 Tr. : Again.
- 408 Chn.: Reflected.
- 409 Tr. : Very good. So if I throw a duster. Have you seen a duster?
- 410 Chn.: Yes sir.
- 411 Tr. : If I throw it will it reflect?
- 412 Chn.: No sir.
- 413 Tr. : How? When a duster is thrown like a ball eh, now was it able to stay there? When this duster was thrown was it able to stay there?
- 414 Chn.: No sir.
- 415 Tr. : It came back. Have you seen it?
- 416 Chn.: Yes sir.
- 417 Tr. : It's like a ball. When you throw, it bounce back. [demonstrates] Have you seen it?
- 418 Chn.: Yes sir.
- 419 Tr. : So the light also when it was thrown at a mirror, it also came back. And that we have the what? Reflected light. Is that clear?
- 420 Chn.: Yes sir.
- 421 Tr. : Very good. Go on. Yes Eunuch.
- 422 Eunuch: You can see the light when the reflected light enters your eyes.
- 423 Tr. : As some of you said, when a moving car is coming the light comes into your eyes. Is that clear?
- 424 Chn.: Yes sir.
- 425 Tr. : Aha. Go on.
- 426 Eunuch: Why can you see things in the but not in the dark?

- 427 Tr. : Yes, this is a question. Why can you see things in the light but not in the dark? Yes answer the question. Why? Yes. Why can you see things in the light. Yes.
- 428 Chd.: Because it is reflected.
- 429 Tr. : No. Why can you see things? During the day we can see things, isn't it?
- 430 Chn.: Yes sir.
- 431 Tr. : But why can't we see some during the night?
- 432 Chd.: Sir.
- 433 Tr. : Yes.
- 434 Chd.: Because there is no light.
- 435 Tr. : Because there is no light. Very good. Clap for him.
- 436 Chn.: [Clapping].
- 437 Tr. : You see during the day you can move freely as I am moving. Have you seen it?
- 438 Chn.: Yes sir.
- 439 Tr. : But during the night you will even knock knees against what? An object. Is that clear?
- 440 Chn.: Yes sir.
- 441 Tr. : Even when your mother ask you to for a lamp during the night in your room. When you are going what happens? Yes..
- 442 Chn.: You would be afraid.
- 443 Tr. : You, you become afraid? Why are you afraid? Because there is no light? ? Because there is nno light? Very good. Clap for him.
- 444 Chn.: [Clapping].
- 445 Tr. : If there is light will you be afraid?
- 446 Chn.: No sir.
- 447 Tr. : You will by all means go. Very good. That means we need light to do so many things. Without light we will find ourselves in a very or eh, a very eh, awkward position or in a place where we shall even eh hurt ourselves. When eh, eh, parent send to go and find what? Eh, a lamp in a room but where there is light you will by all means go for it, isn't it?
- 448 Chn.: Yes sir.
- 449 Tr. : So that's the question. Eh the answer. Yes go on.
- 450 Eunuch: Some things reflected.
- 451 Tr. : Reflect most of the light.
- 452 Eunuch: Reflect most of the light which hit them.
- 453 Tr. : Yes.
- 454 Eunuch: This happens with a mirror.
- 455 Tr. : Very good. We did the experiment. You see. It is said that some objects reflect most of the light which hit them. Now when the experiment went on what happened to the glass? Was there any reflected light? Was there any reflected light?
- 456 Chn.: No sir.
- 457 Tr. : But what about the mirror? What happened to it? What happens to the mirror? Yes aha Eunuch.
- 458 Chn.: You can see your face.

- 459 Tr. : No. When the light was thrown at the mirror what happened?
Yes Atuahene say something.
- 460 Atua: [No response]
- 461 Tr. : It comes back but there was a word which was used. Yes.
- 462 Chd.: Reflected.
- 463 Tr. : It was reflected. All of you.
- 464 Chn.: It was reflected.
- 465 Tr. : Good. That's why we had the reflected light. Have you seen it?
- 466 Chn.: Yes sir.
- 467 Tr. : Okay. Yes go on.
- 668 Eunuch: Try this ac, act, activity
- 469 Tr. : Try this activity. Aha
- 470 Eunuch: In a dark room shine a touch
- 471 Tr. : Torch. All of you torch.
- 472 Chn.: Torch.
- 473 Tr. : Ah we call it torch light. Aha torch. Yes on a mirror.
- 474 Eunuch: On a mirror and let the reflected light fall on a piece of card.
- 475 Tr. : A piece of card. Aha.
- 476 Eunuch: Shine the torch from a different place. Does the reflected light
move for?
- 477 Tr. : Move too.
- 478 Eunuch: [Use different objects instead of the mirror].
- 479 Tr. : Yes, we have done that. Aha.
- 480 Chn.: Try a polish eh! a piece of white paper, a bottle, a piece of
wood and other things which you have in the classroom.
- 481 Tr. : Ya. Now when you say a polished thing. Is there any polished
thing here?
- 482 Chd.: Yes sir.
- 483 Tr. : Now let us this one. Hein? It has got a very fine face, hein? Let
see if this can reflect as was done to the mirror. Is that clear?
- 484 Chn.: Yes.
- 485 Tr. : Aha, we are going to see if we can see the light somewhere.
Can you see it?
- 486 Chn.: No sir.
- 487 Tr. : See when you come closer. When the room is too dark. Can't
you see it? Can't you see it?
- 488 Chn.: Yes sir.
- 489 Tr. : Have you seen it?
- 490 Chn.: Yes sir.
- 491 Tr. : Aha. So some shine objects can also be reflected like the
mirror. is that clear
- 492 Chn.: Yes sir

Appendix 5 (45) TL: Mathematics

LESSON : FORTY FIVE
SCHOOL : R1
CLASS : P5
SUBJECT: MATHEMATICS
TOPIC : COMMON FACTORS
TEACHER: TL
DATE : 22ND MARCH, 1996

- 1 Tr. : Stand. Good morning children.
- 2 Chn.: Good morning.
- 3 Tr. : How are you?
- 4 Chn.: We are fine. Thank you and you.
- 5 Tr. : I'm also fine. Okay sit down. Today is Friday 22nd. March, 1996. As you all know we are still on sets of numbers and we are going to discuss about common numbers of counting numbers. All of you.
- 6 Tr. : Good. When we say common. Who can tell me any thing that is common with human being? That if you see that common thing with some one the same thing will be seen with another person. Yes Esther.
- 7 Esther: Ears.
- 8 Tr. : The ears of what a human being. Very good. Yes.
- 9 Chd.: Eyes.
- 10 Tr. : Yes. Very good. Yes.
- 11 Chn.: Hands.
- 12 Tr. : Hands. Very good. Yes.
- 13 Chn.: Nose
- 14 Tr. : Very good. Clap for them.
- 15 Chn.: [Clapping]
- 16 Tr. : You see all these are common. So when we say a common factor. We are now going to deal with numerals. We are going to find common factors for numbers. Is that clear?
- 17 Chn.: Yes sir..
- 18 Tr. : Now lets see these two numbers. The set of factors for fifteen. We have to break fifteen into factors. What are the factors of fifteen? Yes who can tell me one? Yes.
- 19 Chd.: One.
- 20 Tr. : One. Yes Anane.
- 21 Anane: Three.
- 22 Tr. : Three, good is a factor of fifteen. Yes Helena.
- 23 Helena: Five.
- 24 Tr. : Very good. Clap for her.
- 25 Chn.: [Clapping].
- 26 Tr. : Is also a factor of eh, fifteen. Yes you.
- 27 Chd.: Seven.
- 28 Tr. : Is seven a factor of fifteen?
- 29 Chn.: No sir.

20 Tr. : Esther.
 31 Esther: Fifteen.
 32 Tr. : Fifteen is a factor of fifteen. Is there any number to be added?
 33 Chn.: No sir.
 34 Tr. : Very good. These are the only factors of fifteen. Now who can call out the numbers? The factors of fifteen are, yes Isaac.
 35 Isaac: One.
 36 Tr. : Yes one.
 37 Isaac.: Three
 38 Tr. : Three
 39 Isaac.: Five
 40 Tr. : Five
 41 Isaac.: Fifteen
 42 Tr. : Fifteen. Very good. Now lets go to sixteen. The set of factors of sixteen is what? Yes Rita.
 43 Rita.: One.
 44 Tr. : One is one. Good. Yes Cecilia.
 45 Cecilia: Two.
 46 Tr. : Is two a factor of sixteen?
 47 Cecilia: Yes.
 48 Tr. : Yes. Very good. Two. Yes any number? Yes you.
 49 Chd.: Four
 50 Tr. : Four. Is it a factor of sixteen? You.
 51 Chd.: Three
 52 Tr. : I am asking of four. Is it a factor of sixteen?
 53 Chd.: Yes.
 54 Tr. : Yes, very good. So we have four. What next?
 55 Chd.: Six.
 56 Tr. : Six. Are you sure? Yes, six is it a factor? Atuahene. Is it a factor of sixteen?
 57 Atua.: No.
 58 Tr. : As he said six is not a factor.
 59 Chn.: No.
 60 Tr. : No, no is not a factor of sixteen. Very good. Is there any number which is a factor of sixteen? Yes Ansre.
 61 Ansre: Sixteen.
 62 Tr. : Before sixteen a certain number must come.
 63 Ansre: Eight.
 64 Tr. : Eight, very good. Clap for him.
 65 Chn.: [Clapping].
 66 Tr. : We have eight is a factor of sixteen. Now is there any number? Yes you.
 67 Chn.: Sixteen.
 68 Tr. : Sixteen Very good. Sixteen. So we have these numbers as factors of sixteen. Now, because it is a set. Look at the board. We have to draw something like this.[demonstrates on the bb]. We put them in a set box. Have you seen it?

69 Chn.: Yes sir.

70 Tr. : Aha. You put them in a set box like this because they are all factors. Now we come to the third stage. Therefore the common factors of the fifteen and the sixteen. Now before we put down a word like 'is' or 'are', is or are, hein?

71 Chn.: Yes sir.

72 Tr. : We must go through the numbers to find the common factors. When we get more than one then we use the word 'are' but when we get one, we use what? 'Is' as the singular form. Is it clear?

73 Chn.: Yes sir.

74 Tr. : Now is there any common factor?

75 Chn.: One.

76 Tr. : Is what?

77 Chn.: One.

78 Tr. : Speak louder. All of us we have to speak louder. Is what?

79 Chn.: One.

80 Tr. : One. One is common factor. Very good. So we have to circle it. Is there any common factor? Yes Eunuch. Is there any common factor?

81 Chn.: No sir.

82 Tr. : Why? Can't we get two here.

83 Chn.: No sir.

84 Tr. : What about three?

85 Chn.: No sir.

86 Tr. : What about four?

87 Chn.: No sir.

88 Tr. : Five?

89 Chn.: No sir.

90 Tr. : Eight?

91 Chn.: No

92 Tr. : Then the only factor which is a common factor is what?

93 Chn.: One.

94 Tr. : So we are going to use the word, 'is', one. Is that clear?

95 Chn.: Yes sir.

96 Tr. : And the one must be put in a set box. Is that clear?

97 Chn.: Yes sir.

98 Tr. : That is number one. Okay. Let us see number two.

99 Chn.: [Talking together].

100 Tr. : Writes on the bb. Now look on the board. What are the factors of twelve? Yes Mabel.

101 Mabel: One

102 Tr. : We start with one. Aha, yes

103 Chn.: Two.

104 Tr. : Yes two is a factor. Yes you. Your name?

105 Chn.: Rita

106 Tr. : Rita aha.

107 Rita : Three.

108 Tr. : Three is a factor. Very good. Yes Michael.

- 109 Michael: Four.
- 110 Tr. : Four is a factor. Very good. Yes Antwi
- 111 Antwi: Six.
- 112 Tr. : Six is a factor. Very good. Yes Anokye
- 113 Anokye: And twelve.
- 114 Tr. : And twelve. Good. Clap for him.
- 115 Chn.: [Clapping].
- 116 Tr. : You see, in fact these are the only factors of twelve. Now lets find factors of this number, of twenty. Yes what are the factors of twenty? Ahweri.
- 117 Ahweri: One.
- 118 Tr. : You always start with one. Yes Abrafi.
- 119 Abrafi: Two.
- 120 Tr. : Two. Yes.
- 121 Chd.: Four.
- 122 Tr. : Four. Very good. Aha Isaac.
- 123 Isaac: Five
- 124 Tr. : Very good. Clap for him
- 125 Chn.: [Clapping].
- 126 Tr. : Yes Christina
- 127 Christina: Ten.
- 128 Tr. : From five you go to ten. Are you sure?
- 129 Chn.: No sir.
- 130 Tr. : Is six a factor of twenty? Yes Antwi.
- 131 Antwi: And twenty.
- 132 Tr. : Are you sure?
- 133 Antwi: Yes sir.
- 134 Tr. : Somebody said a number before twenty. What was that number? Kuffour.
- 135 Kuffour: Ten.
- 136 Tr. : Good. Ten. Then the last number is what?
- 137 Chd.: And twenty.
- 138 Tr. : And twenty. Very good. Now as I told you already you have to put all these numbers in what? In a set box. Then we come to the next stage. By writing, therefore, the common factors of which numbers? Yes.
- 139 Chn.: One
- 140 Tr. : No. Which numbers did we find the factors? Eh, which numbers? Mabel.
- 141 Mabel: Twelve and twenty.
- 142 Tr. : Very good. Twelve and twenty. Of twelve and twenty. Now you write down the word is or are, lets go back to the factors. Is that clear?
- 143 Chn.: Yes sir.
- 144 Tr. : Which are the common ones? Cecilia.
- 145 Cecilia: One times five.
- 146 Tr. : No. You tell me only one factor which is common.
- 147 Cecilia: One
- 148 Tr. : Very good. One is common. What else? Serwah.

- 149 Serwah: Two.
- 150 Tr. : Two is common. Very good. Yes Aha.
- 151 Chn.: Four.
- 152 Tr. : Four is common. We have four here and another one here. Yes is there any other one?
- 153 Chn.: No
- 154 Tr. : Okay. So what word would you write here. Is or are?
- 155 Chn.: Are.
- 156 Tr. : You write what?
- 157 Chn.: Are.
- 158 Tr. : Are. Very good. Are, then tell me the number of factors that we have. Daniel.
- 159 Daniel: One
- 160 Tr. : One. Aha. Yes.
- 161 Chn.: Two.
- 162 Tr. : Two. Aha. Yes
- 163 Chn.: Four.
- 164 Tr. : Four. Any number?
- 165 Chn.: No sir.
- 166 Tr. : Good.. So the factors are. Now all of you say it.
- 167 Chn.: The factors are one, two and four.
- 168 Tr. : Very good clap for yourselves.
- 169 Chn.: [Clapping].
- 170 Tr. : Now at this point I want you to work these. These two numbers. Shall I say thirteen and twenty one. You break it into factors. Then you find the common factors. Who can work it? Yes Atuahene come and work it for us. You find the factors of thirteen. Then somebody will also come and find the factors of twenty one. Find the factors of thirteen. What are the factors? Mhum.
- 171 Atua.: Goes to the board.
- 172 Tr. : Is two a factor of thirteen?
- 173 Chn.: No sir.
- 174 Tr. : Is not, is not. So who will come and help? Aha hurry up.
- 175 Chd.: Comes to the board.
- 176 Tr. : No. Is three a factor of thirteen?
- 177 Chn.: No sir.
- 178 Tr. : before you put down thirteen eh a factor for thirteen, you must let us know. Sit down. Yes Esther. Any number? Any number? Tell us. Yes any number which is a factor of thirteen?
- 179 Esther: Thirteen.
- 180 Tr. : Yes go and write it. So we have one and thirteen. Good. Now we come to twenty one. Any factor? Yes Daniel come and write it. Hurry up. Factors of twenty one
- 181 Daniel: [Goes to the board and works].
- 182 Tr. : Yes read the numbers for us to hear. What are the factors of thirteen, oh twenty one?
- 183 Daniel: One, three, and twenty one.

- 184 Tr. : Very good, clap for him.
- 185 Chn.: [Clapping].
- 186 Tr. : Now we come to the third stage. Now we shorten it by writing CF. When I write CF what does it mean? Yes Amoako.
- 187 Chn.: One, two.
- 188 Tr. : What is the meaning of CF?
- 189 Chn.:
- 190 Tr. : Very good. Clap for him.
- 191 Chn.: [Clapping].
- 192 Tr. : Common factors. So what is common factors for thirteen and twenty one? Samson come and write them down. Come and write the numbers down. Hurry up.
- 193 Samson: Writes one
- 194 Tr. : One is the only factor?
- 195 Samson: Yes sir.
- 196 Tr. : Is it correct? Anane.
- 197 Chn.: Yes sir.
- 198 Tr. : One is common in both figures. Is that clear?
- 199 Chn.: Yes sir.
- 200 Tr. : So we have one as the common factor for thirteen and what?
- 201 Tr+Chn.: Twenty one
- 202 Tr. : Is that clear?
- 203 Chn.: Yes sir.
- 204 Tr. : Okay. Now the last example so that I get you work to do. Now let us find eighteen and twenty four. Yes who will break this into factors? Esther come and do it for us.
- 205 Esther: [Goes to the board].
- 206 Tr. : When you finish you tell us the names of the factors you have written
- 207 Esther: [Works silently at the board].
- 208 Tr. : Now tell us the figures. What you have written down.
- 209 Chn.: One, two, three, nine and eighteen.
- 210 Tr. : Very good. You have written this. Is there any one to be added? She has one, two, three, nine and eighteen. Is there any one to be added? Do you have something to be added?
- 211 Chn.: No sir.
- 212 Tr. : Now check it up. If you say one is a factor of eighteen, two is a factor of eighteen, three is a factor of eighteen, nine is a factor of eighteen. Is there any number to be added?
- 213 Chn.: No sir/Yes sir.
- 214 Tr. : Yes what is that number? Yes Eunuch.
- 215 Eunuch: Six.
- 216 Tr. : Very good clap for him.
- 217 Chn.: [Clapping].
- 218 Tr. : Six is also a factor of what?
- 219 Chn.: Eighteen.

- 220 Tr. : So we have to put down six here. Eh, six,, nine, eighteen. Very good. Now lets break down twenty four into factors. Who can do it? Yes Antwi.
- 221 Antwi: Goes to the board.
- 222 Tr. : Spread it out. Spread it out. Hum?
- 223 Antwi: [Working].
- 224 Tr. : Now Antwi has finished. Yes call up the numbers for us.
- 225 Chn.: One, two, four, six, eight and twenty four.
- 226 Tr. : He has written these figures. Is there any number to be added? Esther which is that number?
- 227 Chn.: Three and twelve.
- 228 Tr. : Three and twelve. Good. Clap for her.
- 229 Chn.: [Clapping].
- 230 Tr. : So we have to put three at this point and also twelve at this point. Is that clear?
- 231 Chn.: Yes Sir.
- 232 Tr. : Aha.. This will help us to know the factors for twenty four. I am going to rewrite it again.
- 233 Chn.: [Talking together].
- 234 Tr. : Have you seen the numbers?
- 235 Chn.: Yes sir..
- 236 Tr. : Okay, what are the factors of twenty four? Read them out. Read them out. All of you.
- 237 Chn.: One, two, three, four, six, eight, twelve and twenty four.
- 238 Tr. : Very good. These are the factors. Now which numbers are described to be common? Yes Christie.
- 239 Chn.: One
- 240 Tr. : One is common here. Now I want you to circle out. Go and circle out Serwah. Yes, hurry up. The common factors.
- 241 Serwah: Goes to the board and circles a common factors.
- 242 Tr. : Very good clap for her.
- 243 Chn.: [Clapping].
- 244 Tr. : What else? Anane.
- 245 Anane: Goes to the board and circles a number.
- 246 Tr. : Good clap for her.
- 247 Chn.: [Clapping].
- 248 Tr. : Yes Mabel.
- 249 Mabel: [Goes to the board]
- 250 Chn : [Talking together].
- 251 Mabel: [Circles a number]
- 252 Tr. : Good. Clap for her.
- 253 Chn.: [Clapping]
- 254 Tr. : Yes anyone? Yes Kubi. Today I haven't seen you. Come forward. Is there any number to be circled?
- 255 Kubi: [Goes to the board but circles a wrong number].

- 256 Tr. : Yes any number? Yes Kubi. Excuse me. What you have circled, do you have the number here? Do you have it? No. This is eight is not eighteen. Is eight. Do you have eight here?
- 257 Kubi.: No.
- 258 Tr. : Then is not common. Okay sit down. Eight is not common. Yes what is the next number which is common?
- 259 Chn.: None.
- 260 Tr. : Is what.
- 261 Chn.: None.
- 262 Tr. : So we write CF. Therefore CF is equals what?
- 263 Chn.: One, two, three and six.
- 264 Tr. : So we have to put commas to indicate the numbers so that when you are writing you don't write them eh, together. Is that clear?
- 265 Chn.: Yes sir.
- 266 Tr. : Okay any question.
- 267 Chn.: No sir.
- 268 Tr. : Then I am going to get you an exercise to do on this. Daniel come and share them out. Hurry up.
- 269 Daniel.: [Distributes pupils exercise books].
- 270 Tr. : [Writes on the board]
- 271 Chn.: [Talking together].
- 272 Tr. : Write down today's date. Write your name as usual
- 273 Chn.: [Talking together].
- 274 Tr. : [Continue to write on the board].
- 275 Chn.: [Talking together].
- 276 Tr. : Now look on the board. You are going to follow this statement. Number one. The set of factors of twelve is. Then you put them down. Is that clear?
- 277 Chn.: Yes sir.
- 278 Tr. : Then the set of factors for twenty is
- 279 Int. : **Me pa wo kyew me maame se me bra.**
- 280 Tr. : Nods. Then the set of common factors for twelve and twenty are. Then you put them down.
- 281 Chn.: Yes sir.
- 282 Tr. : The same thing must be done with number two. The set of factors of thirteen. The set of factors of twenty one. Therefore the set of common factors for thirteen and twenty one. Then you conclude. Is that clear?
- 283 Chn.: Yes sir.
- 284 Tr. : Here, number three you are finding the factors of eighteen and twenty four. Any question?
- 285 Chn.: No sir.
- 286 Tr. : Okay then start. I want to see the first who will
- 287 Chn.: [Talking together].
- 288 Tr. : Hurry up. You see I have told you that when you are coming to school you must always bring your materials needed for class work. Hein?

- 289 Chn.: Yes sir.
- 290 Tr. : Yes and this will help the smooth running.
- 2991 Chn.: [Working and talking together].
- 292 Tr. : You must finish them. Write them neatly. The factors of twelve
- 293 Chn.: [Talking together].
- 294 Tr. : Now you should not forget to bring the set box. Hein?
- 295 Chn.: Yes.
- 296 Tr. : Aha
- 297 Chn.: [Working and talking together].
- 298 Tr. : [Goes round] Finish number one everything before you go on number two. Is that clear?
- 299 Chn.: Yes sir.
- 300 Tr. : Ahaa, because you must work every sum on the board. We have worked every sum on the board.
- 301 Chn.: [Working and talking together].
- 302 Tr. : If you have any problem you can call me. Hein? Raise up your hand then I come to your place
- 303 Chn.: [Working and talking together].
- 304 Tr. : Who has finished with number one? You haven't finished. Where are the answers. The set of common factors for twelve and one twenty are. This is the last stage. Hein?
- 305 Chn.: [Talking together].
- 306 Tr. : You should have left a space for the correction. Hein? Go on.
- 307 Chn.: [Working and talking together].
- 308 Tr. : Why don't you put down the titles before coming to the next line? Hein, when you write one sentence complete. Hum? Finish with this before you come to the next one. Mhum, go on.
- 309 Chn.: [Working and talking together].
- 310 Tr. : What's this number?
- 311 Chn.: Six
- 312 Tr. : Is six a factor of twenty? Hein? Is it a factor of twenty?
- 313 Chn.: [Inaudible].
- 314 Tr. : What's that?
- 315 Chn.: [Inaudible].
- 316 Tr. : Hein?
- 317 Chn.: Thirteen
- 318 Tr. : Thirteen and what's this number? What's this number?
- 319 Chn.: [Inaudible].
- 320 Tr. : [Shows work to another child]. What has he written?
- 321 Chd : Twelve.
- 322 Tr. : Is twelve a factor of thirteen? Hum? Is it a factor?
- 323 Chn.: [Working].
- 324 Tr. : Four. Have you cancelled it?
- 325 Chd.: No sir.
- 326 Tr. : Then cancel it well.
- 327 Chn.: [Talking together].

- 328 Tr. : Now are these the only factors of twelve? We have done it. Twelve. We have written one, two, three. There is a number which also divides it exactly without a remainder. What's the number?
- 329 Chd. : Three.
- 330 Tr. : No. Apart from three. And you have written six. What comes before six? What's that number? Between three and six there is a number which is a factor of twelve. What is that number?
- 331 Chd.: Four.
- 332 Tr. : Where is it? Put it down. Make an arrow. Then put four here, Aha,
- 333 Chn.: [Working].
- 334 Tr. : I have told you when you finish a work leave a line. If. Leave a line. Some of you are not trying to follow that instruction. You have to leave a line in-between the two works that you have done.
- 335 Chd. : Me pa wo kyew me ntwa ho? Common factors.
- 336 Tr. : Yes you have to circle the common factors that you have chosen.
- 337 Chd.: Yoo!
- 338 Tr. : So we shall erase this side. Go on don't waste time. Kwesi.
- 339 Kwesi: Sir.
- 340 Tr. : Why are you waiting? Hum? Go on. You see you draw this. Eh at the end you draw this. A set of. Hææ!
- 341 Chn.: [working].
- 342 Tr. : Aha, yes. You have written one, two, four, five. Is there any number, which can divide? Hum. What are some of the factors of twenty? You have written one, two, four, five. Is there any number? From five what will be the next factor of twenty? Hum? Tell me before you put it down. From five what will be the next? Hum? Number or the next factor of twenty?
- 343 Chd.: Seven.
- 344 Tr. : Seven is not a factor.
- 345 Chd.: Yes.
- 344 Tr. : No is not a factor. We are now moving up. After five what will be the next factor?
- 346 Chd.: Seven.
- 347 Tr. : No. Which number again?
- 348 Chn.: Eight.
- 349 Tr. : No.
- 350 Chn.: Ten.
- 351 Tr. : Good. You put ten down.

Appendix 6: Content Areas covered in Teachers' Lessons

English

Teacher	Lesson	Topic
TA	1	Reading skills: Word recognition
TB	5	Reading skills: Reading for the exact meaning. 'The Twins'
TC	7	Intensive reading skills: Reading for implied meaning
TD	11	Reading skills: Reading for the exact meaning
TE	15	Clocks and Watches
TF	20	Descriptive writing: My class teacher
TG	26	Reading skills: Reading for the exact meaning
TH	27	Reading skills: Reading for the exact meaning: Cleanliness
TI	31	Lost in the forest: Intensive reading skills
TJ	37	Finding lost articles: Intensive reading skills
TK	39	Maame Asabea's Stall: Intensive reading skill
TL	43	At the Post Office [Intensive reading skills]

Science

Teacher	Lesson	Topic
TA	2	Poisonous Food
TB		
TC	8	Liquids that mix
TD	14	Liquids: Forms of water
TE	16	Keeping Healthy: Cooking
TF	21	Air exerts pressure
TG	24	Bebia mmoa da (Animals' habitat)
TH	29	Air occupies space
TI	34	The uses and importance of water
TJ	38	Kinds of animals
TK	42	Soil Types
TL	44	Light: Reflected light

Ghanaian language

Teacher	Lesson	Topic
TA	3	Me nana ho asem [Narrative writing: My Grandfather]
TB	6	Din pa enne Din hunu: Common & Proper nouns
TC	9	Anuanom Bannu: Two brothers. Reading for exact meaning
TD	13	Essay writing-Descriptive :Me sukuu (My School)
TE	18	Twɔ Kasa Mmra: Kasakoa enne abebuo (Riddles & Proverbs)
TF	19	Menim: Intensive reading skill
TG	23	Dodo kabɛa (plurals)
TH	30	Fame tu : [Poetry reading]
TI	33	Akuafo atamfo [The farmers enemy]
TJ	35	Agya Poku Akwantuo: [Intensive reading skill]
TK	40	Hwan na eyee adee? [Intensive reading skills]
TL		

Mathematics

Teacher	Lesson	Topic
TA	4	Measurement: Line segment
TB		
TC	10	Averages: The number plane.
TD	12	Multiplication: solving for the unknown
TE	17	Solving for the unknown
TF	22	Addition of like fractions
TG	25	Addition of money
TH	28	Telling the time
TI	32	Integers: The number line
TJ	36	Telling the Time
TK	41	Addition of Like fractions
TL	45	Common Factors

APPENDIX 7: CODING SCHEME

PURPOSE AND FUNCTIONS OF CLASSROOM CODESWITCHING

Codes, Definitions and Examples of Speech -Acts.

This scheme has the purpose of unearthing information about the purpose and function of code-switching in teacher and learner classroom language. It is an adaptation from Guthrie and Guthrie, (1987) observation schedule(Guthrie and Guthrie in Goldman and Trueba(eds.) (1987).

CODES	SYMBOL	DEFINITIONS AND EXAMPLES OF SPEECH-ACTS
1. New Information	(NIF)	The discourse is realised mostly through statements. Its main function is to give new information. It provides the content of the lesson.
2. Explanation	(EXP)	The discourse provides an explanation of language presented earlier. It clarifies earlier information or discourse. Elucidation and exposition of earlier expressions and rhetorical questions fall under this category.
3. Question	(QUE)	The utterance is a question. It is a discourse that intends to elicit a response. It is a request for information. It is mostly realised through the use of a direct questions. Its function is to involve the learners in classroom interaction.. It elicitates from learners knowledge of what has been presented either immediately before the question or in the past. Sometimes teachers use boundary markers. Items such as: Yes, Next are used. In Twi items such as <i>den bio?(what?)</i> , <i>eye sen?(what's the sum)</i> etc.
4. Description	(DES)	The discourse is an exposition of what the teacher intends to do next. It explains what the teacher wants to do. It is information for the children to prepare them for the next stage of the lesson. It includes an explanation for what teacher wants done.
5. Response	(REP)	The discourse is an answer to a question. It is an utterance intended as a response to a question.
6. Elucidation Quest	(ELQ)	The discourse is a request for clarification. It may be realised through a direct question for clarification or exclamation for clarification. e.g. <i>Saa!</i> , <i>Ha!</i> etc. for Twi.
7. Evaluation	(EVA)	The utterance is a personal judgement or an expression of attitude about teacher or pupil. It involves some comment on teacher or pupil behaviour. It is neither a praise nor a blame.
8. Blame	(BLA)	The discourse is a disapproval of teacher or pupil behaviour. It blames, scolds, nags, or rebukes teacher or pupil's conduct.
9. Reject	(REJ)	The discourse rejects teacher or pupil utterance or response as inappropriate. Very commonly the teacher says "No". Sometimes the teacher repeats without comment the pupils response but quickly passes the question to another child. Pupils normally respond by simply saying "No sir/madam. In Twi it is realised through such items as "dabi", "woboa" etc.
10. Praise	(PRA)	The discourse commends teacher or pupil behaviour. It seeks to establish rapport. Very commonly it is realised through such items as very good, good, <i>mmo/mo wo aye adee paa, eye.</i>

11. Directives	(DIR)	The utterance has the function of requesting for non linguistic response. It's realised through the use of simple imperatives. Examples include, clean the board, take the chalk, clap for him/her/them, and in Twi examples are bra ha(come here) ka woho(hurry) etc.
12. Acknowledge	(ACK)	The discourse has the function of accepting as correct teacher or pupil utterance. Examples include, correct, right, Yes, and in Twi, wa twa, enowa nono.
13. Request for Action	(RFA)	The discourse or utterance is a request for action. Examples include teacher/pupil asking for work to be marked. It includes request for information in statement form.
14. Monitor	(MON)	The discourse has the function of checking learners understanding of what has been presented before. Very often it is a direct question aimed at monitoring learners' ability to cope with the new information. It checks for understanding of what has been taught.
15. Identifier	(IDD)	The utterance is a label of objects, institutions, places events or people. The utterance is a name.
16. Correction	CRT	The utterance seeks to correct learner errors. All forms of correction falls under this category.
17. Manage	(MAN)	The discourse is intended to organise the class. Its purpose is to direct pupils on how to work. Examples include instructions for forming groups and instructions on how to carry out a task
18. Boundary Marker	(BMK)	The discourse is a boundary marker. It's function is to mark boundaries in the discourse. Examples include, "okay. right. shein, Mhum, Yoo" etc.
19. Prompt	(PMT)	The discourse has the function of encouraging the learner to provide a response. Examples include items such as "Yes, goon, aha, Yiri woho paa" etc.
20. Speaker Selection	(SSL)	The utterance selects or nominates a speaker of next turn. Example include "You", "Ama" and "Yes + pointing".
21. Attraction	(ATG)	The discourse has the function of seeking for attention. It is an attention getter. It also includes teasing to attract attention. Examples include "Hey", "He", "Listen", look here".
22. Protest	(PRT)	The discourse expresses objection to teacher/pupil behaviour. Examples include "Stop that!" "He!" "Gyae!"
23. Aside	(ASD)	The utterance or statement is not directly connected to classroom discourse. It is a speech act directed to an outsider. It may also be a comment by a pupil to another not based on the lesson.
24. Counting	(CNT)	The speech act involves counting. It indicates naming numerals or counting objects.
25. Translation	(TRN)	The discourse is a direct translation of expressions or sentences.
26. Untranslatability	(UNT)	The utterance/ item has no direct equivalent in the alternative language. These are mostly technical terms, names of organisations and institutions or special names of dishes or food items.
27. Formulaic Expression	(FEP)	The utterance has equivalent expression in the alternative language. It is used because of performance ease. It involves some form of school 's everyday language. Routine classroom expressions. Examples include "Yes sir. No sir, sir, teacher, madam, stop talking, again
28. False Start	(FLS)	The discourse is an aborted utterance
29. Fillers	(FIL)	The discourse enables a speaker to maintain a turn. It also includes hesitations.

30. Order	(ORD)	The discourse calls for order. It has the purpose for maintaining discipline and order in class. It is often realised by items such as “stop talking”, “keep quiet” “gyae kasa”, kasa”, “Kom”, etc.
31. Summary	(SUM)	The utterance is a summary of information presented earlier.
32. Substitution	(SUB)	The utterance is an embedded use of English/Twi word(s) as substitutes for the matrix language where there is an alternative in the matrix language. The word(s) involved here are not formulaic or routine classroom expressions.
33. Reinforcement	(RIN)	The utterance or discourse is a repetition or reformulation of earlier expressions to reinforce what has been said earlier.
34. Interactional Particle	(ITP)	The utterance or discourse involves the use of words/phrases/clauses that do not readily associate to recognisable meanings or functions.
35. Request for Translation	(RFT)	The discourse is a direct request for translation equivalent of an earlier expression.

Appendix 8 : Transcription Conventions

The conventions are as follows:

Symbol	Definition
fresh line	: new turn
normal	: mostly used language
bold and blue colour	: less used language (i.e. embedded language)
bold and red colour	: marks end of one matrix language and the beginning of another matrix language in lessons with two matrixes.
Underline	: reading a text in English
bold/underline	: reading a text in Twi
Tr.:	: teacher turn (teacher talk)
Chn.:	: learners talk (children: several learners)
Chd.1: Chd.2: etc.	: identified learners talk
Chd.:	: Learner (child) Unidentified learner
Int.	: Intruder (outsider's) speech
InT.	: Speech directed to an intruder.
Tr. + Chn	: overlap in the speech of teacher and learners
Tr. + Chd.	: overlap in the speech of teacher and learner
/ziraffe/ /enepant/	: deviant pronunciation
(laughter) (points)	: comment on verbal and non-verbal interaction
[...inaudible]	: unintelligible talk
[]	: researcher's comment
?	: rising intonation i.e. a question
!	: emphasis
...	: pauses
,	: normal speech pause (i.e. a pause after a phrase or clause)
...	: normal sentence pause. (each represents one second).
***	pauses of thirty seconds. (each * represents thirty seconds.)

QUESTIONNAIRE

Frequency of Responses for All Teachers

PRIMARY SCHOOL TEACHERS' LANGUAGE MEDIUM USE SURVEY 1966

Please complete the following:

Name of school:.....

What class do you teach?.....

Section A

How to answer this questionnaire

Answer the question by putting a tick [$\sqrt{}$] in the column or box which best matches your own opinion. For example.

(a) In which language or languages do you mostly carry out the following functions in school?

	L A N G U A G E S U S E D I N						
	Valid	Missing	Always	In Eng.	In Eng.	More in	Always
	Cases	Cases	in Eng.	more	& L1	L1 than	in L1
				than L1	Equally	Eng.	
TEACHER FUNCTIONS							
1. conduct morning prayer at the school assembly					$\sqrt{}$		

Please start now

1). In which language or languages do you mostly carry out the following functions in school? Please tick the language column that applies to the function in the checklist.

Please tick [$\sqrt{}$] the language column that applies to the function in the check list

	L A N G U A G E S U S E D I N						
	Valid	Missing	Always	In Eng.	In Eng.	More in	Always
	Cases	Cases	in Eng.	more	& L1	L1 than	in L1
				than L1	Equally	Eng.	
TEACHER FUNCTIONS							
1. Address an assembly of pupils	767	14	225	272	213	47	10
2. Send messages to parents through pupils	760	21	104	146	290	144	76
3. Explain rules on how to play games and carry out activities during PE Lessons	755	26	203	220	215	91	26
4. Comment on pupils' compound work	756	25	206	234	213	62	41
5. Assign pupils work in the school garden	739	42	137	164	213	141	84

(2) . In which language or languages do you mostly carry out the following functions in class?

Please tick [✓] the language column that applies to the function in the check list.

	L A N G U A G E S U S E D I N						
	Valid	Missing	Always	In Eng.	In Eng.	More in	Always
	Cases	Cases	in Eng.	more	& L1	L1 than	in L1
				than L1	Equally	Eng.	
TEACHER FUNCTIONS							
1. Introduce lesson topic to class	774	7	373	185	155	44	17
2. Present lesson content	759	22	288	227	169	57	18
3. Give explanations of content	761	20	166	247	224	81	43
4. specify examples	743	38	211	228	192	76	36
5. Give routine commands on discipline and classroom organisation	774	7	347	226	148	43	19
6. Give rubrics of class assignment e.g. explain task to be done	769	12	195	237	202	93	42
7. Give explanations of work on the board	770	11	272	242	179	61	16
8. Give instructions for home work	762	19	244	195	205	79	39
9. Explain meaning in a reading aloud lesson	763	18	333	210	163	44	13
10. Check understanding of new vocabulary, phrases and sentences	766	15	286	250	164	49	17
11. Talk to individual pupils in class	766	15	216	250	183	86	31
12. Talk to a group or group work in class	767	14	216	261	205	58	27
13. Provide corrections on errors in class	767	14	242	210	206	75	34
14. Send pupils on errands to other teachers or head teacher	758	23	384	187	97	49	41
15. Create humour in class	730	51	163	213	217	65	72
16. Praise pupils' work in class	767	14	512	147	83	18	7
17. Give summaries of lesson content	767	14	307	223	164	49	24

(3) In which language or languages do you teach the following subjects?

	L A N G U A G E S U S E D I N						
	Valid	Missing	Always	In Eng.	In Eng.	More in	Always
	Cases	Cases	in Eng.	more	& L1	L1 than	in L1
				than L1	Equally	Eng.	
TEACHER FUNCTIONS							
1 English language	757	24	577	145	29	1	5
2 Ghanaian language	711	70	16	18	27	94	556
3 Mathematics	762	19	240	227	192	42	11
4 Elementary Science	763	18	215	246	210	76	16
5 Life Skills	760	21	187	235	209	108	21
6 Agriculture Science	762	19	179	238	202	118	25
7 Social Studies	764	17	200	248	189	100	27
8 Cultural studies	760	21	109	216	227	155	53
9 Physical Education	760	21	277	228	170	67	18

(4). Please estimate the percentage of time you talk to your pupils in class in English in the following subjects.

Tick [✓] the column that applies in your situation in the checklist for English Language

	Estimate of amount of time spent talking in English						
	Valid Cases	Missing cases	0-20 % never	21-40% rarely	41-60% sometimes	61-80% often	81-100 Very often
1 Mathematics	770	11	18	89	216	293	154
2 Elementary Science	756	25	20	95	248	258	135
3 Life Skills	763	18	30	115	274	234	110
4.Cultural Studies	763	18	38	162	268	210	85

(5). Please estimate the percentage of time you talk to your pupils in class in Ghanaian Language in the following subjects.

Tick [✓] the column that applies in your situation in the checklist for Ghanaian Language

	Estimate of amount of time spent talking in Ghanaian Language						
	Valid Cases	Missing cases	0-20 % never	21-40% rarely	41-60% sometimes	61-80% often	81-100 Very often
1 Mathematics	743	38	178	269	181	91	24
2 Elementary Science	734	47	151	252	215	91	25
3 Life Skills	732	49	135	222	234	119	22
4.Cultural Studies	737	44	98	192	245	161	41

(6). Please estimate the percentage of time you talk to your pupils in class in Mixed Language (code mixing and code switching) in the following subjects.

Tick [✓] the column that applies in your situation in the checklist for Mixed Language

	Estimate of amount of time spent talking in Mixed language						
	Valid Cases	Missing cases	0-20 % never	21-40% rarely	41-60% sometimes	61-80% often	81-100 Very often
1 Mathematics	746	35	107	202	264	125	48
2 Elementary Science	737	44	98	193	273	138	35
3 Life Skills	736	45	92	194	267	149	34
4.Cultural Studies	736	45	66	182	280	165	43

(7). Do you have books for teaching Ghanaian language in your school for your class?

Tick [✓] the appropriate box that applies to your situation.

Valid cases	Missing cases	Yes	No
726	55	341	385

(8). Please list the titles and quantities of books you have in your school for teaching the Ghanaian language subject in your class.(continue on a separate sheet if you have many books)

Class	
(If you teach a combined class prepare that of each class separately)	
Title of books	Quantities
e.g. Twi Kasa Mmra	10
1	
2	
3	
4	
5	
6	

(9). Do you personally teach a Ghanaian language as a subject?

Please [✓] tick the box that applies to your situation.

Valid cases	Missing cases	Yes	No
765	16	575	190

10. If you answer "No", why do you not teach a Ghanaian language as a subject?

.....

.....

.....

.....

.....

(11). If you answered "Yes" to question 9, Please estimate the percentage of the Ghanaian language text book which you will have covered by the end of the year.

Tick [✓] the appropriate column that applies to your situation.

		0-20 %, very little	21-40 % little	41-60 % average	61- 80 % above average	81-100 % Excellent
Valid cases	Missing cases					
560	221	73	99	260	111	17

(12). Please estimate the percentage of your pupils that can perform each of the following language skills appropriate to their level in Ghanaian language.

Tick [✓] the appropriate column that applies to your situation.

Percentage of class that can perform skill in Ghanaian language

Language Skills	Estimate of amount of time spent talking in English						
	Valid	Missing cases	0-20 % very few	21-40% few	41-60% some	61-80% many	81-100% All or almost
1.Read science text for the class and understand	657	124	170	141	194	129	23
2.Write descriptive essays about themselves with comprehension	663	118	210	170	199	73	11
3.Talk about everyday activities in class with comprehension	666	115	76	113	166	240	71
4.Listen to teacher's lecture on science with comprehension	663	118	86	98	190	204	85
5.copy science notes from the bb correctly	650	131	83	62	121	267	117
6.Take notes during lecture correctly	616	165	322	129	102	48	15

(13). Do you have books for teaching English language in your school for your class?

Tick [✓] the appropriate box that applies to your situation.

Valid cases	Missing cases	Yes	No
766	16	712	53

(14). Please list the titles and quantities of books you have in your school for teaching English language subject in your class.

Class	
(If you teach a combined class prepare that of each class separately)	
Title of books	Quantities
e.g. English for primary schools Pupils' book 3	20
1	
2	
3	
4	
5	

(15). Please estimate the percentage of the English language text book you will have read with your class by the end of the year.

Tick [✓] the appropriate column that applies to your situation.

		0-20 %, very little	21-40 % little	41-60 % average	61- 80 % above average	81-100 % Excellent
Valid cases	Missing cases					
744	37	47	83	318	256	40

(16). Please estimate the percentage of your pupils that can perform each of the following language skills appropriate to their level in English language.

Tick [✓] the appropriate column that applies to your situation.

Percentage of class that can perform skill in English language

	Estimate of amount of time spent talking in English						
	Valid Cases	Missing cases	0-20 % very few	21-40% few	41-60% some	61- 80% many	81-100% All or almost all
1.Language Skills							
Read science text for the class and understand	747	34	133	196	270	133	15
2. Write descriptive essays about themselves with comprehension	741	40	197	179	229	121	15
3.Talk about everyday activities in class with comprehension	749	32	118	171	260	173	27
4.Listen to teacher's lecture on science with comprehension	739	42	76	167	244	204	48
5.copy science notes from the bb correctly	730	51	71	64	170	292	133
6.Take notes during lecture correctly	691	90	324	160	121	67	19

Section B: Language Attitude.

INSTRUCTION

In the following section, please select from one of the options provided the idea that best represent your own view. For each question, tick the appropriate column.

(Q.17). The uses of Ghanaian language as medium of instruction in classes one to three contributes to primary school pupils' poor academic performance in English.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
768	13	155	263	51	240	59

(Q 18). I did not receive adequate training in how to teach Ghanaian language during their teacher training.

Tick [✓] the appropriate column that best represents your own view

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
768	13	88	162	38	316	150

(Q 19). I will not want to become Ghanaian language teachers because such teachers are not respected

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
769	12	29	36	25	310	369

(Q 20). The use of a Ghanaian language medium of instruction is used throughout the primary school will be improve Basic Education Examination results.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
774	7	25	64	29	339	317

(Q 21). A Ghanaian language should be the sole medium of instruction in the six years of Basic primary education

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
773	8	18	34	12	323	386

(Q 22). Only one Ghanaian language should be taught in all Ghanaian primary schools

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
773	8	35	92	12	315	319

(Q.23) English language should be the sole medium of instruction in the six years Basic Primary Education.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
775	6	166	259	47	247	56

(Q 24). School children in each region should learn only one dominant language of the region

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
772	9	94	322	32	245	79

(Q.25). Posting of newly trained teachers should be to their home regions to enable them to teach Ghanaian language.

Tick [✓] the appropriate column that best represents your own view

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
773	8	98	285	32	269	89

(Q.26). Posting of teachers should be outside their home regions to force them to speak English to their pupils most of the school time.

Tick [✓] the appropriate column that best represents your own view

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
771	10	122	304	66	240	39

(Q.27). The practice where all primary school teachers teach both English and a Ghanaian language should be stopped.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
768	13	87	148	42	356	135

(Q.28). Primary school teachers should have official permission to use both Ghanaian language and English in each lesson as medium of instruction. i.e. teachers should be allowed to translate, code mix and code switch in the two languages.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
771	10	60	366	52	240	53

(Q.29). A pass in a Ghanaian language should be a condition for promotion of primary school teachers.

Tick [✓] the appropriate box column best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
769	12	28	229	66	296	150

(Q.30). A pass in a Ghanaian language should be a condition for admission to Junior secondary school (J.S.S) pupils to the Senior secondary school (S.S.S).

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
768	13	47	296	50	290	85

(Q.31). A pass in English language should remain a condition for admission to the senior secondary school (S.S.S.)

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
772	9	264	397	15	77	19

(Q.32). A pass in English language should remain a condition for admission of teacher trainees to colleges.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
761	20	279	388	14	56	24

(Q.33). A pass in Ghanaian language should be a condition for admission of teacher trainees.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
762	9	63	280	56	279	84

(Q.34). A pass in English language should remain a condition for admission of students to the university.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
761	20	282	356	18	66	39

(Q.35). Parents will be happy if primary school pupils are literate in Ghanaian language by the end of primary class six.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
761	20	90	348	66	196	61

(Q.35b). Parents will be happy if primary school pupils' are literate in English language by the end of primary class six.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
762	19	334	358	9	29	32

(Q.36). I combine English and Ghanaian language in most of my lessons in the primary school (i.e. I code mix and code switch between a Ghanaian language and English.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
759	22	47	474	40	170	28

(Q.37). I think that the combined use of English and Ghanaian Language(code -mixing and code switching) in a lesson is educationally beneficial to the pupils.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
766	15	88	473	51	130	24

(Q.38). When pupils arrive in P4 from P3, I automatically switch from Ghanaian language medium of instruction to use of English as medium of instruction.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
757	24	142	458	41	110	6

(Q.39). I change from a Ghanaian language medium of instruction to English language medium simultaneously for all subjects in primary class four.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
753	28	57	375	46	254	21

(Q.40).I use my own personal judgement to change from Ghanaian language medium of instruction to English. The change is not simultaneous for all subjects.

Tick [✓] the appropriate column that best represents your own view.

		1	2	3	4	5
Valid cases	Missing cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
754	27	58	485	35	157	19

(Q.41). What language or languages do you personally use in carrying out the following activities?

Tick [✓] the language column that apply in the following checklist

	L A N G U A G E S U S E D I N						
	Valid Cases	Missing Cases	Always in Eng.	In Eng. more than L1	In Eng. & L1 Equally	More in L1 than Eng.	Always in L1
A C T I V I T I E S							
1.View or listen to your favourite radio or television programme	695	86	240	264	150	31	10
2.converse with a colleague of yours who also speaks your language on:							
a) family matters	727	54	30	33	89	236	339
b) day to day events e.g. politics	733	48	85	147	189	194	118
c) science and mathematics	735	46	220	267	177	45	26
converse with others at home	745	36	22	33	126	296	272
3.Language used at home							
4.Buying and shopping in the market	744	37	18	29	151	280	266
5.Religious worship	735	46	71	71	186	194	213
6.Write personal letters	745	36	628	54	48	8	7
7.Write official letters	744	37	717	16	6	2	3
8.Read in your leisure hours	781	0	36	471	178	78	10

Section C: Personal Information.

(Q42).a).Region.....

b). District.....

c). Class you teach now..(1995/1996 academic year).....

valid cases	Missing cases	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
779	2	126	128	129	133	135	128

d). No of pupils in class in 1996.....

(Q43) Is your school in the rural area or urban?

Tick [☒] the appropriate box.

Valid cases	Missing cases	Urban	Rural
781	2	421	358

(Q 44). What is your sex? Please tick [☒] the appropriate box

Tick [☒] the appropriate box.

Valid cases	Missing cases	Female	Male
767	14	431	322

(Q. 45). For how long have you been teaching?

Tick [☒] the appropriate column

Valid cases	Missing cases	1 0-5 yr.	2 6-10 yr.	3 11-15 yr.	4 16-20 yr.	5 21-25 yr.	6 26-30 yr.	7 31+ years
766	15	224	198	65	56	126	70	27

Q.46)What teacher qualification do you have?

Tick [☒] the appropriate box in the checklist

764	Valid cases
17	Missing cases
10	Untrained Middle or secondary school Leavers (Pupil-Teachers)
5	Untrained High School/ 'A' Level Pupil-Teacher
2	Two-year Post Middle Certificate "B" Teachers
29	Two-year Post "B" Certificate "A" Teachers
578	Four-year Post-Middle Certificate "A" Teachers
9	Two-year Post Secondary Certificate "A" Teachers
127	Three-year Post secondary Certificate "A" Teachers
3	Three-year Specialist Teachers
1	Three-year Diploma Certificate Teachers
0	Non-professional graduate Teachers
1	Professional Graduate Teachers

(Q. 47). Into which of the following age groups do you fall?

Tick [☒] the appropriate category.

		1	2	3	4	5	6	7	8
Valid cases	Missing cases	20 and below	21-25 years	26-30 years	31-35 years	36-40 years	41-45 years	46- 50 years	50 & above
745	36	7	64	141	149	110	104	96	74

Please return all completed questionnaires to the address below

Al-Hassan Seidu

Saint Louis Teacher Training College

P. O. Box 3041

Kumasi

Appendix 9b

Survey Questionnaire Results for All Classes: Summary Responses.

1). In which language(s) do you mostly carry out the following functions in school?.

		L A N G U A G E S U S E D I N S C H O O L				
		Always in Eng.	In Eng. more than L1	In Eng. & L1 Equally	More in L1 than Eng.	Always in L1
TEACHER FUNCTIONS	Total	Percent	Percent	Percent	Percent	Percent
1. Address an assembly of pupils	N= 767	29.3	35.5	27.8	6.1	1.3
2. Send messages to parents through pupils	N= 760	13.7	19.2	38.2	18.9	10.0
3. Explain rules on how to play games and carry out activities during PE Lessons	N= 755	26.9	29.1	28.5	12.1	3.4
4. Comment on pupils' compound work	N= 756	26.4	31.0	28.2	8.2	5.4
5. Assign pupils work in the school garden	N= 739	18.5	22.2	28.8%	19.1	11.4

(2) . In which language or languages do you mostly carry out the following functions in class?

L A N G U A G E S U S E D I N C L A S S						
	Valid cases	Always in Eng.	In Eng. more than L1	In Eng. & L1 Equally	More in L1 than Eng.	Always in L1
TEACHER FUNCTIONS	Total	Percent	Percent	Percent	Percent	Percent
1. Introduce lesson topic to class	N= 774	48.2	23.9	20.0	5.7	2.2
2. Present lesson content	N= 759	37.9	29.9	22.3	7.5	2.4
3. Give explanations of content	N= 761	21.8	32.5	29.4	10.6	5.7
4. specify examples	N= 743	28.4	30.7	25.8	10.2	4.8
5. Give routine commands on discipline and classroom organisation	N= 774	44.8	29.2	19.1	4.4	2.5
6. Give rubrics of class assignment e.g. explain task to be done	N= 769	25.4	30.8	26.3	12.1	5.5
7. Give explanations of work on the board	N= 770	35.3	31.4	23.2	7.9	2.1
8. Give instructions for home work	N= 762	32.0	25.6	26.9	10.4	5.1
9. Explain meaning in a reading aloud lesson	N= 763	43.6	27.5	21.4	5.8	1.7
10. Check understanding of new vocabulary, phrases and sentences	N= 766	37.3	32.6	21.4	6.4	2.2
11. Talk to individual pupils in class	N= 766	28.2	32.6	23.9	11.2	4.0
12. Talk to a group or group work in class	N= 767	28.2	34.0	26.7	7.6	3.5
13. Provide corrections on errors in class	N= 767	31.6	27.4	26.9	9.8	4.4
14. Send pupils on errands to other teachers or head teacher	N= 758	50.7	24.7	12.8	6.5	5.4
15. Create humour in class	N= 730	22.3	29.2	29.7	8.9	9.9
16. Praise pupils' work in class	N= 767	66.8	19.2	10.8	2.3	0.9
17. Give summaries of lesson content	N= 767	40.0	29.1	21.4	6.4	3.1

3). In which language or languages do you teach the following subjects?

		L A N G U A G E S U S E D I N C L A S S				
		Always in Eng.	In Eng. more than L1	In Eng. & L1 Equally	More in L1 than Eng.	Always in L1
TEACHER FUNCTIONS	Total	Percent	Percent	Percent	Percent	Percent
1 English language	N=757	76.2	19.2	3.8	0.1	0.7
2 Ghanaian language	N=711	2.3	2.5	3.8	13.2	78.2
3 Mathematics	N=762	31.5	36.4	25.2	5.5	1.4
4 Elementary Science	N=763	28.2	32.2	27.5	10.0	2.1
5 Life Skills	N=760	24.6	30.9	27.5	14.2	2.8
6 Agriculture Science	N=762	23.5	31.2	26.5	15.5	3.3
7 Social Studies	N=764	26.2	32.5	24.7	13.1	3.5
8 Cultural studies	N=760	14.3	28.4	29.9	20.4	7.0
9 Physical Education	N=760	36.4	30.0	22.4	8.8	2.4

(4). Please estimate the percentage of time you talk to your pupils in class in English in the following subjects.

Estimate of amount of time spent talking in English						
	Valid cases	0-20 % never	21-40% rarely	41-60% sometimes	61-80% often	81-100 Very often
	Total	Percent	Percent	Percent	Percent	Percent
1 Mathematics	N=770	2.3	11.6	28.1	38.1	20.0
2 Elementary Science	N=756	2.6	12.6	32.8	34.1	17.9
3 Life Skills	N=763	3.9	15.1	35.9	30.7	14.4
4.Cultural Studies	N=763	5.0	21.2	35.1	27.5	11.1

(5). Please estimate the percentage of time you talk to your pupils in class in Ghanaian Language in the following subjects.

Estimate of amount of time spent talking in Ghanaian Language						
		0-20 % never	21-40% rarely	41-60% sometimes	61-80% often	81-100 Very often
	Total	Percent	Percent	Percent	Percent	Percent
1 Mathematics	N=743	24.0	36.2	24.4	12.2	3.0
2 Elementary Science	N=734	20.6	34.3	29.3	12.4	3.4
3 Life Skills	N=732	18.4	30.3	32.0	16.3	3.0
4.Cultural Studies	N=737	13.3	26.1	33.2	21.8	5.6

(6). Please estimate the percentage of time you talk to your pupils in class in Mixed Language (code mixing and code switching) in the following subjects.

Estimate of amount of time spent talking in Mixed language						
	Valid Cases	0-20 % never	21-40% rarely	41-60% sometimes	61-80% often	81-100 Very often
1 Mathematics	N=746	14.3	27.1	35.4	16.8	6.4
2 Elementary Science	N=737	13.3	26.2	37.0	18.7	4.7
3 Life Skills	N=736	12.5	26.4	36.3	20.2	4.6
4.Cultural Studies	N=736	9.0	24.7	38.0	22.4	5.8

Q7.

Do you have books for teaching Ghanaian language in your school for your class?		Yes	No
	Valid cases	Percent	Percent
	N=726	47.0	53.0

(8). Please list the titles and quantities of books you have in your school for teaching the Ghanaian language subject in your class.(continue on a separate sheet if you have many books)

Class	
(If you teach a combined class prepare that of each class separately)	
Title of books	Quantities
e.g. Twi Kasa Mmra	10
1	
2	
3	
4	
5	
6	

(9).

Do you personally teach a Ghanaian language as a subject?		Yes	No
	Valid cases	Percent	Percent
	N=765	75.2	24.8

10. If you answer "No", why do you not teach a Ghanaian language as a subject?

.....

.....

.....

.....

.....

(11). If you answered "Yes" to question 9, Please estimate the percentage of the Ghanaian language text book which you will have covered by the end of the year.

	0-20 %	21-40 %	41-60 %	61- 80 %	81-100 %
Valid cases	very little	little	average	above average	Excellent
Total	Percent	Percent	Percent	Percent	Percent
560	13.0	17.7	46.4	19.8	3.0

(12). Please estimate the percentage of your pupils that can perform each of the following language skills appropriate to their level in Ghanaian language.

Percentage of class that can perform skill in Ghanaian language						
	Valid Cases	0-20 % very few	21-40% few	41-60% some	61-80% many	81-100% All or almost all
Language Skills	Total	Percent	Percent	Percent	Percent	Percent
1.Read science text for the class and understand	N=657	25.9	21.5	29.5	19.6	3.5
2.Write descriptive essays about themselves with comprehension	N=663	31.7	25.6	30.0	11.0	1.7
3.Talk about everyday activities in class with comprehension	N=666	11.4	17.0	24.9	36.0	10.7
4.Listen to teacher's lecture on science with comprehension	N=663	13.0	14.8	28.7	30.8	12.8
5.copy science notes from the bb correctly	N=650	12.8	9.5	18.6	41.1	18.0
6.Take notes during lecture correctly	N=616	52.3	20.9	16.6	7.8	2.4

Q13).

Do you have books for teaching English language in your school for your class?	Valid cases	Yes	No
	Total	Percent	Percent
	N=766	93.0	7.0

(14). Please list the titles and quantities of books you have in your school for teaching English language subject in your class.

Class

(If you teach a combined class prepare that of each class separately)	
Title of books	Quantities
e.g. English for primary schools Pupils' book 3	20
1	
2	
3	
4	
5	

(15). Please estimate the percentage of the English language text book you will have read with your class by the end of the year.

	0-20 %	21-40 %	41-60 %	61- 80 %	81-100 %
Valid cases	very little	little	average	above average	Excellent
Total	Percent	Percent	Percent	Percent	Percent
N=744	6.3	11.2	42.7	34.4	5.4

(16). Please estimate the percentage of your pupils that can perform each of the following language skills appropriate to their level in English language.

	Percentage of class that can perform skill in English language					
	Valid Cases	0-20 % very few	21-40% few	41-60% some	61-80% many	81-100% All or almost all
1. Language Skills	Total	Percent	Percent	Percent	Percent	Percent
2. Read science text for the class and understand	N=747	17.8	26.2	36.1	17.8	17.8
3. Write descriptive essays about themselves with comprehension	N=741	26.6	24.2	30.9	16.3	2.0
4. Talk about everyday activities in class with comprehension	N=749	15.8	22.8	34.7	23.1	3.6
5. Listen to teacher's lecture on science with comprehension	N=739	10.3	22.6	33.0	27.6	6.5
6. copy science notes from the bb correctly	N=730	9.7	8.8	23.3	40.0	18.2
7. Take notes during lecture correctly	N=691	46.9	23.2	17.5	9.7	2.7

Section B: Language Attitude.

INSTRUCTION

In the following section, please select from one of the options provided the idea that best represent your own view. For each question, tick the appropriate column.

(Q.17). The uses of Ghanaian language as medium of instruction in classes one to three contributes to primary school pupils' poor academic performance in English.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
N=768	20.2	34.2	6.6	31.3	7.7

(Q 18). I did not receive adequate training in how to teach Ghanaian language during their teacher training.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
N=768	11.7	21.5	5.0	41.9	19.9

(Q 19). I will not want to become Ghanaian language teachers because such teachers are not respected

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
769	3.8	4.7	3.3	40.3	48.0

(Q 20). The use of a Ghanaian language medium of instruction is used throughout the primary school will be improve Basic Education Examination results.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
774	3.2	8.2	3.7	43.4	40.6

(Q 21). A Ghanaian language should be the sole medium of instruction in the six years of Basic primary education

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
773	2.3	4.4	1.6	41.8	49.9

(Q.22). Only one Ghanaian language should be taught in all Ghanaian primary schools

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
773	4.5	11.9	1.6	40.8	41.3

(Q.23) English language should be the sole medium of instruction in the six years Basic Primary Education.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
775	21.4	33.4	6.1	31.9	7.2

(Q.24). School children in each region should learn only one dominant language of the region

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
772	12.2	41.7	4.1	31.7	10.2

(Q.25). Posting of newly trained teachers should be to their home regions to enable them to teach Ghanaian language.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
773	12.7	36.9	4.1	34.8	11.5

(Q.26). Posting of teachers should be outside their home regions to force them to speak English to their pupils most of the school time.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
771	15.8	39.4	8.6	31.1	5.1

(Q.27). The practice where all primary school teachers teach both English and a Ghanaian language should be stopped.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
768	11.3	19.3	5.5	46.4	17.6

(Q.28). Primary school teachers should have official permission to use both Ghanaian language and English in each lesson as medium of instruction. i.e. teachers should be allowed to translate, code mix and code switch in the two languages.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
771	7.8	47.5	6.7	31.1	6.9

(Q.29). A pass in a Ghanaian language should be a condition for promotion of primary school teachers.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
769	3.6	29.8	8.6	38.5	19.5

(Q.30). A pass in a Ghanaian language should be a condition for admission to Junior secondary school (J.S.S) pupils to the Senior secondary school (S.S.S).

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
768	6.1	38.5	6.5	37.8	11.1

(Q.31). A pass in English language should remain a condition for admission to the senior secondary school (S.S.S.)

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
772	34.2	51.4	1.9	10.0	2.5

(Q.32). A pass in English language should remain a condition for admission of teacher trainees to colleges.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
761	36.7	51.0	1.8	7.4	3.2

(Q.33). A pass in Ghanaian language should be a condition for admission of teacher trainees.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
762	8.3	36.7	7.3	36.6	11.0

(Q.34). A pass in English language should remain a condition for admission of students to the university.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
761	37.1	46.8	2.4	8.7	5.1

(Q.35). Parents will be happy if primary school pupils are literate in Ghanaian language by the end of primary class six.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
761	11.8	45.7	8.7	25.8	8.0

(Q.35b). Parents will be happy if primary school pupils' are literate in English language by the end of primary class six.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
762	43.8	47.0	1.2	3.8	4.2

(Q.36). I combine English and Ghanaian language in most of my lessons in the primary school (i.e. I code mix and code switch between a Ghanaian language and English.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
759	6.2	62.5	5.3	22.4	3.7

(Q.37). I think that the combined use of English and Ghanaian Language(code -mixing and code switching) in a lesson is educationally beneficial to the pupils.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
766	11.5	61.7	6.7	17.0	3.1

Q.38). When pupils arrive in P4 from P3, I automatically switch from Ghanaian language medium of instruction to use of English as medium of instruction.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
757	18.8	60.5	5.4	14.5	0.8

(Q.39). I change from a Ghanaian language medium of instruction to English language medium simultaneously for all subjects in primary class four.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
753	7.6	49.8	6.1	33.7	2.8

(Q.40).I use my own personal judgement to change from Ghanaian language medium of instruction to English. The change is not simultaneous for all subjects.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	Percent	Percent	Percent	Percent	Percent
754	7.7	64.3	4.6	20.8	2.5

(Q.41). What language or languages do you personally use in carrying out the following activities?

L A N G U A G E S U S E D I N S C H O O L						
	Valid Cases	Always in Eng.	In Eng. more than L1	In Eng. & L1 Equally	More in L1 than Eng.	Always in L1
A C T I V I T I E S	Total	Percent	Percent	Percent	Percent	Percent
1.View or listen to your favourite radio or television programme	695	34.5	38.0	21.6	4.5	1.4
2.converse with a colleague of yours who also speaks your language on:						
a) family matters	727	4.1	4.5	12.2	32.5	46.6
b) day to day events e.g. politics	733	11.6	20.1	25.8	26.5	16.1
c) science and mathematics	735	29.9	36.3	24.1	6.1	3.5
converse with others at home	745	3.0	4.4	16.9	39.2	36.5
3.Buying and shopping in the market	744	2.4	3.9	20.3	37.6	35.8
4.Religious worship	735	9.7	9.7	25.3	26.4	29.0
5.Write personal letters	745	80.4	6.9	6.1	1.0	0.9
6.Write official letters	744	96.4	2.2	0.8	0.3	0.4
7.Read in your leisure hours	745	63.2	23.9	10.5	1.3	1.1

Section C: Personal Information.

(Q42).a).Region... 10.....

b). District.....

c). Class you teach now..(1995/1996 academic year).....

valid cases	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Total	Percent	Percent	Percent	Percent	Percent	Percent
N=779	16.2	16.4	16.6	17.1	17.3	16.4

d). No of pupils in class in 1996.....

(Q43) Is your school in the rural area or urban?

Valid cases	Urban	Rural
Total	Percent	Percent
N=779	54	46

(Q 44). What is your sex? Please tick [✓] the appropriate box

Valid cases	Female	Male
	445	
767	58.0	42.0

(Q. 45). For how long have you been teaching?

Valid	1	2	3	4	5	6	7
cases	0-5 yr.	6-10 yr.	11-15 yr.	16-20 yr.	21-25 yr.	26-30 yr.	31+ years
766	29.2	25.8	8.5	7.3	16.4	9.1	3.5

Q.46)What teacher qualification do you have?

Frequency	Percent	Valid cases=764
10	1.2	Untrained Middle or secondary school Leavers (Pupil-Teachers)
5	0.6	Untrained High School/ 'A' Level Pupil-Teacher
2	0.3	Two-year Post Middle Certificate "B" Teachers
29	3.7	Two-year Post "B" Certificate "A" Teachers
578	74.0	Four-year Post-Middle Certificate "A" Teachers
9	1.2	Two-year Post Secondary Certificate "A" Teachers
127	16.3	Three-year Post secondary Certificate "A" Teachers
3	0.4	Three-year Specialist Teachers
1	0.1	Three-year Diploma Certificate Teachers
1	0.1	Professional Graduate Teachers

(Q. 47). Into which of the following age groups do you fall?

	1	2	3	4	5	6	7	8
Valid cases	Below 20	21-25 years	26-30 years	31-35 years	36-40 years	41-45 years	46- 50 years	50 & above
745	0.9	8.6	18.9	20.0	14.8	14.0	12.9	9.9

Please return all completed questionnaires to the address below
 Al-Hassan Seidu
 Saint Louis Teacher Training College
 P. O. Box 3041
 Kumasi

Appendix 9c

RESPONSES FOR YEARS 1 - 3

Questionnaire Results Frequency of Responses for Lower Primary Schools

1). In which language(s) do you mostly carry out the following functions in school?

		L A N G U A G E S U S E D I N S C H O O L				
		Always in Eng.	In Eng. more than L1	In Eng. & L1 Equally	More in L1 than Eng.	Always in L1
TEACHER FUNCTIONS	Total	freq.	freq.	freq.	freq.	freq.
1. Address an assembly of pupils	N=376	98	113	131	26	8
2. Send messages to parents through pupils	N=373	25	59	152	91	46
3. Explain rules on how to play games and carry out activities during PE Lessons	N=374	57	93	121	78	25
4. Comment on pupils' compound work	N=374	71	104	130	38	31
5. Assign pupils work in the school garden	N=360	35	67	122	82	54

(2) . In which language or languages do you mostly carry out the following functions in class?

L A N G U A G E S U S E D I N C L A S S						
	Valid cases	Always in Eng.	In Eng. more than L1	In Eng. & L1 Equally	More in L1 than Eng.	Always in L1
TEACHER FUNCTIONS	Total	freq.	freq.	freq.	freq.	freq.
1. Introduce lesson topic to class	N=378	110	95	114	42	17
2. Present lesson content	N=371	81	98	121	53	18
3. Give explanations of content	N=373	32	87	146	66	42
4. Specify examples	N=362	61	81	131	62	27
5. Give routine commands on discipline and classroom organisation	N=379	114	112	106	31	16
6. Give rubrics of class assignment e.g. explain task to be done	N=377	49	85	132	72	39
7. Give explanations of work on the board	N=376	66	111	128	56	15
8. Give instructions for home work	N=373	50	80	144	62	37
9. Explain meaning in a reading aloud lesson	N=371	111	96	112	39	13
10. Check understanding of new vocabulary, phrases and sentences	N=374	97	115	104	42	16
11. Talk to individual pupils in class	N=375	65	107	111	67	25
12. Talk to a group or group work in class	N=375	56	109	133	51	26
13. Provide corrections on errors in class	N=375	70	76	137	62	30
14. Send pupils on errands to other teachers or head teacher	N=369	147	92	60	36	34
15. Create humour in class	N=355	49	78	135	33	60
16. Praise pupils' work in class	N=375	211	86	57	15	6
17. Give summaries of lesson content	N=376	99	98	117	39	23

3). In which language or languages do you teach the following subjects?

L A N G U A G E S U S E D I N C L A S S						
		Always in Eng.	In Eng. more than L1	In Eng. & L1 Equally	More in L1 than Eng.	Always in L1
TEACHER FUNCTIONS	Total	freq.	freq.	freq.	freq.	freq.
1 English language	N=369	251	86	27	1	4
2 Ghanaian language	N=361	7	10	9	42	293
3 Mathematics	N=372	53	115	153	41	10
4 Elementary Science	N=372	50	89	148	71	14
5 Life Skills	N=373	37	81	140	95	20
6 Agriculture Science	N=371	36	78	134	99	24
7 Social Studies	N=376	39	82	143	87	25
8 Cultural studies	N=374	28	57	135	107	47
9 Physical Education	N=374	71	104	122	61	16

(4). Please estimate the percentage of time you talk to your pupils in class in English in the following subjects.

Estimate of amount of time spent talking in English						
	Valid cases	0-20 % never	21-40% rarely	41-60% sometimes	61-80% often	81-100 Very often
	Total	freq.	freq.	freq.	freq.	freq.
1 Mathematics	N=378	10	60	149	119	40
2 Elementary Science	N=369	16	59	149	105	40
3 Life Skills	N=376	21	80	156	91	28
4.Cultural Studies	N=374	29	103	133	86	23

(5). Please estimate the percentage of time you talk to your pupils in class in Ghanaian Language in the following subjects.

Estimate of amount of time spent talking in Ghanaian Language						
		0-20 % never	21-40% rarely	41-60% sometimes	61-80% often	81-100 Very often
	Total	freq.	freq.	freq.	freq.	freq.
1 Mathematics	N= 366	38	131	113	71	13
2 Elementary Science	N=361	38	109	137	61	16
3 Life Skills	N=359	36	89	133	90	11
4.Cultural Studies	N=365	34	70	124	113	24

(6). Please estimate the percentage of time you talk to your pupils in class in Mixed Language (code mixing and code switching) in the following subjects.

Estimate of amount of time spent talking in Mixed language						
	Valid Cases	0-20 % never	21-40% rarely	41-60% sometimes	61-80% often	81-100 Very often
1 Mathematics	N=368	20	90	162	73	23
2 Elementary Science	N=365	21	87	156	87	14
3 Life Skills	N=365	23	85	145	98	14
4.Cultural Studies	N=363	20	83	151	93	16

Q7.

Do you have books for teaching Ghanaian language in your school for your class?		Yes	No
	Valid cases	freq.	freq.
	N=363	160	203

(8). Please list the titles and quantities of books you have in your school for teaching the Ghanaian language subject in your class.(continue on a separate sheet if you have many books)

Class	
(If you teach a combined class prepare that of each class separately)	
Title of books	Quantities
e.g. Twi Kasa Mmra	10
1	
2	
3	
4	
5	
6	

(9).

Do you personally teach a Ghanaian language as a subject?		Yes	No
	Valid cases	freq.	freq.
	N= 378	293	85

10. If you answer "No", why do you not teach a Ghanaian language as a subject?

.....

.....

.....

.....

.....

(11). If you answered "Yes" to question 9, Please estimate the percentage of the Ghanaian language text book which you will have covered by the end of the year.

	0-20 %	21-40 %	41-60 %	61- 80 %	81-100 %
Valid cases	very little	little	average	above average	Excellent
Total	freq.	freq.	freq.	freq.	freq.
279	30	44	136	59	10

(12). Please estimate the percentage of your pupils that can perform each of the following language skills appropriate to their level in Ghanaian language.

Percentage of class that can perform skill in Ghanaian language						
	Valid Cases	0-20 % very few	21-40% few	41-60% some	61-80% many	81-100% All or almost all
Language Skills	Total	Percent	Percent	Percent	Percent	Percent
1.Read science text for the class and understand	N=324	101	69	75	64	15
2.Write descriptive essays about themselves with comprehension	N=327	128	70	87	35	7
3.Talk about everyday activities in class with comprehension	N=329	48	56	77	115	33
4.Listen to teacher's lecture on science with comprehension	N=330	50	50	94	94	42
5.copy science notes from the bb correctly	N=316	58	38	62	113	45
6.Take notes during lecture correctly	N=284	182	43	30	23	6

Q13).

Do you have books for teaching English language in your school for your class?	Valid cases	Yes	No
	Total	freq.	freq.
	N= 375	355	20

(14). Please list the titles and quantities of books you have in your school for teaching English language subject in your class.

Class

(If you teach a combined class prepare that of each class separately)	
Title of books	Quantities
e.g. English for primary schools Pupils' book 3	20
1	
2	
3	
4	
5	

(15). Please estimate the percentage of the English language text book you will have read with your class by the end of the year.

	0-20 %, very little	21-40 % little	41-60 % average	61- 80 % above average	81-100 % Excellent
Valid cases					
Total	freq.	freq.	freq.	freq.	freq.
N= 360	25	40	150	129	16

(16). Please estimate the percentage of your pupils that can perform each of the following language skills appropriate to their level in English language.

Percentage of class that can perform skill in English language						
	Valid Cases	0-20 % very few	21-40% few	41-60% some	61-80% many	81-100% All or almost all
1. Language Skills	Total	Percent	Percent	Percent	Percent	Percent
2.Read science text for the class and understand	N=355	101	102	109	37	6
3. Write descriptive essays about themselves with comprehension	N=352	133	82	87	45	5
4.Talk about everyday activities in class with comprehension	N=361	76	98	107	70	10
5.Listen to teacher's lecture on science with comprehension	N=354	53	100	104	81	16
6.copy science notes from the bb correctly	N=383	67	40	82	126	32
7.Take notes during lecture correctly	N=311	196	56	35	22	2

Section B: Language Attitude.

INSTRUCTION

In the following section, please select from one of the options provided the idea that best represent your own view. For each question, tick the appropriate column.

P1-3

(Q.17). The uses of Ghanaian language as medium of instruction in classes one to three contributes to primary school pupils' poor academic performance in English.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=377	68	123	23	129	34

(Q 18). I did not receive adequate training in how to teach Ghanaian language during their teacher training.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=373	46	80	21	153	73

(Q 19). I will not want to become Ghanaian language teachers because such teachers are not respected

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=378	11	17	11	156	183

(Q 20). The use of a Ghanaian language medium of instruction throughout the primary school will be improve Basic Education Examination results.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=381	16	42	15	161	147

(Q 21). A Ghanaian language should be the sole medium of instruction in the six years of Basic primary education

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=380	9	26	9	176	160

(Q 22). Only one Ghanaian language should be taught in all Ghanaian primary schools

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=381	12	43	7	163	156

(Q.23) English language should be the sole medium of instruction in the six years Basic Primary Education.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=382	60	136	24	134	28

(Q 24). School children in each region should learn only one dominant language of the region

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=378	35	161	9	136	39

(Q.25). Posting of newly trained teachers should be to their home regions to enable them to teach Ghanaian language.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=380	40	143	13	144	40

(Q.26). Posting of teachers should be outside their home regions to force them to speak English to their pupils most of the school time.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=378	54	152	29	130	13

(Q.27). The practice where all primary school teachers teach both English and a Ghanaian language should be stopped.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=378	31	63	16	197	71

(Q.28). Primary school teachers should have official permission to use both Ghanaian language and English in each lesson as medium of instruction. i.e. teachers should be allowed to translate, code mix and code switch in the two languages.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=380	26	203	26	107	18

(Q.29). A pass in a Ghanaian language should be a condition for promotion of primary school teachers.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=378	10	124	32	154	58

(Q.30). A pass in a Ghanaian language should be a condition for admission to Junior secondary school (J.S.S) pupils to the Senior secondary school (S.S.S).

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=379	19	148	26	151	35

(Q.31). A pass in English language should remain a condition for admission to the senior secondary school (S.S.S.)

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=379	120	219	4	29	7

(Q.32). A pass in English language should remain a condition for admission of teacher trainees to colleges.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=373	133	208	6	20	6

(Q.33). A pass in Ghanaian language should be a condition for admission of teacher trainees.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=373	27	141	29	142	34

(Q.34). A pass in English language should remain a condition for admission of students to the university.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=373	131	194	8	28	12

(Q.35). Parents will be happy if primary school pupils are literate in Ghanaian language by the end of primary class six.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=373	35	180	31	101	26

(Q.35b). Parents will be happy if primary school pupils' are literate in English language by the end of primary class six.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=373	144	198	3	19	9

(Q.36). I combine English and Ghanaian language in most of my lessons in the primary school (i.e. I code mix and code switch between a Ghanaian language and English.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=375	24	274	17	54	6

(Q.37). I think that the combined use of English and Ghanaian Language(code -mixing and code switching) in a lesson is educationally beneficial to the pupils.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=376	46	262	16	44	8

Q.38). When pupils arrive in P4 from P3, I automatically switch from Ghanaian language medium of instruction to use of English as medium of instruction.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=371	63	235	16	52	5

(Q.39). I change from a Ghanaian language medium of instruction to English language medium simultaneously for all subjects in primary class four.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=369	25	205	24	106	9

(Q.40).I use my own personal judgement to change from Ghanaian language medium of instruction to English. The change is not simultaneous for all subjects.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=377	21	245	12	95	4

(Q.41). What language or languages do you personally use in carrying out the following activities?

L A N G U A G E S U S E D I N S C H O O L						
	Valid Cases	Always in Eng.	In Eng. more than L1	In Eng. & L1 Equally	More in L1 than Eng.	Always in L1
A C T I V I T I E S	Total	freq.	freq.	freq.	freq.	freq.
1.View or listen to your favourite radio or television programme	N344	106	124	93	14	7
2.converse with a colleague of yours who also speaks your language on:						
a) family matters	360	15	59	39	107	182
b) day to day events e.g. politics	357	45	17	94	89	70
c) science and mathematics	359	90	106	116	29	18
converse with others at home	368	12	11	64	124	157
3.Buying and shopping in the market	368	6	10	83	134	135
4.Religious worship	359	29	31	109	90	100
5.Write personal letters	367	299	31	29	4	4
6.Write official letters	366	350	9	4	1	2
7.Read in your leisure hours	383	239	73	47	5	3

Section C: Personal Information.

(Q42).a).Region...10.....

b). District.....

c). Class you teach now..(1995/1996 academic year).....

valid cases	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Total	freq.	freq.	freq.	freq.	freq.	freq.
N=						

d). No of pupils in class in 1996.....

(Q43) Is your school in the rural area or urban?

Valid cases	Urban	Rural
Total	freq.	freq.
N=		

(Q 44) What is your sex? Please tick [☒] the appropriate box

Valid cases	Female	Male
Total	freq.	freq.
N=		

(Q. 45). For how long have you been teaching?

Valid	1	2	3	4	5	6	7
cases	0-5 yr.	6-10 yr.	11-15 yr.	16-20 yr.	21-25 yr.	26-30 yr.	31+ years
Total.	freq.	freq.	freq.	freq.	freq.	freq.	freq.
N=							

Q.46)What teacher qualification do you have?

Frequency	Percent	Valid cases=764
		Untrained Middle or secondary school Leavers (Pupil-Teachers)
		Untrained High School/ 'A' Level Pupil-Teacher
		Two-year Post Middle Certificate "B" Teachers
		Two-year Post "B" Certificate "A" Teachers
		Four-year Post-Middle Certificate "A" Teachers
		Two-year Post Secondary Certificate "A" Teachers
		Three-year Post secondary Certificate "A" Teachers
		Three-year Specialist Teachers
		Three-year Diploma Certificate Teachers
		Professional Graduate Teachers

(Q. 47). Into which of the following age groups do you fall?

	1	2	3	4	5	6	7	8
Valid cases	Below 20	21-25 years	26-30 years	31-35 years	36-40 years	41-45 years	46- 50 years	50 & above
Total	freq.	freq.	freq.	freq.	freq.	freq.	freq.	freq.

Appendix 9d

RESPONSES FOR Years 4-6

Questionnaire Results: Frequency of Responses for Upper Primary Schools

1). In which language(s) do you mostly carry out the following functions in school?.

		L A N G U A G E S U S E D I N				
		S C H O O L				
		Always in Eng.	In Eng. more than L1	In Eng. & L1 Equally	More in L1 than Eng.	Always in L1
TEACHER FUNCTIONS	Total	freq.	freq.	freq.	freq.	freq.
1. Address an assembly of pupils	N=391	127	159	82	21	2
2. Send messages to parents through pupils	N=387	79	87	138	53	30
3. Explain rules on how to play games and carry out activities during PE Lessons	N=381	146	127	94	13	1
4. Comment on pupils' compound work	N=382	135	130	83	24	10
5. Assign pupils work in the school garden	N=379	102	97	91	59	30

(2) . In which language or languages do you mostly carry out the following functions in class?

In which language or languages do you mostly carry out the following functions in class?

L A N G U A G E S U S E D I N C L A S S						
	Valid cases	Always in Eng.	In Eng. more than L1	In Eng. & L1 Equally	More in L1 than Eng.	Always in L1
TEACHER FUNCTIONS	Total	freq.	freq.	freq.	freq.	freq.
1. Introduce lesson topic to class	N=396	263	90	41	2	0
2. Present lesson content	N=388	207	129	48	4	0
3. Give explanations of content	N=388	134	160	78	15	1
4. specify examples	N=381	150	147	61	14	9
5. Give routine commands on discipline and classroom organisation	N=395	233	114	42	3	3
6. Give rubrics of class assignment e.g. explain task to be done	N=392	146	152	70	21	3
7. Give explanations of work on the board	N=394	206	131	51	5	1
8. Give instructions for home work	N=389	194	115	61	17	2
9. Explain meaning in a reading aloud lesson	N=392	222	114	51	5	0
10. Check understanding of new vocabulary, phrases and sentences	N=392	189	135	60	7	1
11. Talk to individual pupils in class	N=391	151	143	72	19	6
12. Talk to a group or group work in class	N=392	160	152	72	7	1
13. Provide corrections on errors in class	N=392	172	134	69	13	4
14. Send pupils on errands to other teachers or head teacher	N=389	237	95	37	13	7
15. Create humour in class	N=375	114	135	82	32	12
16. Praise pupils' work in class	N=392	301	61	26	3	1
17. Give summaries of lesson content	N=391	208	125	47	10	1

3). In which language or languages do you teach the following subjects?

L A N G U A G E S U S E D I N C L A S S						
		Always in Eng.	In Eng. more than L1	In Eng. & L1 Equally	More in L1 than Eng.	Always in L1
TEACHER FUNCTIONS	Total	freq.	freq.	freq.	freq.	freq.
1 English language	N=388	326	59	2	0	1
2 Ghanaian language	N=350	9	8	18	52	263
3 Mathematics	N=390	187	162	39	1	1
4 Elementary Science	N=391	165	157	62	5	2
5 Life Skills	N=387	150	154	69	13	1
6 Agriculture Science	N=391	143	160	68	19	1
7 Social Studies	N=388	161	166	46	13	2
8 Cultural studies	N=386	81	159	99	48	6
9 Physical Education	N=386	206	124	48	6	2

(4). Please estimate the percentage of time you talk to your pupils in class in English in the following subjects.

Estimate of amount of time spent talking in English						
	Valid cases	0-20 % never	21-40% rarely	41-60% sometimes	61-80% often	81-100 Very often
	Total	freq.	freq.	freq.	freq.	freq.
1 Mathematics	N= 392	8	29	67	174	114
2 Elementary Science	N=387	4	36	99	153	95
3 Life Skills	N=387	9	35	118	143	82
4.Cultural Studies	N=389	9	59	135	124	62

(5). Please estimate the percentage of time you talk to your pupils in class in Ghanaian Language in the following subjects.

Estimate of amount of time spent talking in Ghanaian Language						
		0-20 % never	21-40% rarely	41-60% sometimes	61-80% often	81-100 Very often
	Total	freq.	freq.	freq.	freq.	freq.
1 Mathematics	N=377	140	138	68	20	11
2 Elementary Science	N=373	113	143	78	30	9
3 Life Skills	N=373	99	133	101	29	11
4.Cultural Studies	N= 372	64	122	121	48	17

(6). Please estimate the percentage of time you talk to your pupils in class in Mixed Language (code mixing and code switching) in the following subjects.

Estimate of amount of time spent talking in Mixed language						
	Valid Cases	0-20 % never	21-40% rarely	41-60% sometimes	61-80% often	81-100 Very often
1 Mathematics	N= 378	87	112	102	52	25
2 Elementary Science	N= 372	77	106	117	51	21
3 Life Skills	N= 371	69	109	122	51	20
4.Cultural Studies	N=373	46	99	129	72	27

Q7.

Do you have books for teaching Ghanaian language in your school for your class?		Yes	No
	Valid cases	freq.	freq.
	N= 364	182	182

(8). Please list the titles and quantities of books you have in your school for teaching the Ghanaian language subject in your class.(continue on a separate sheet if you have many books)

Class

(If you teach a combined class prepare that of each class separately)	
Title of books	Quantities
e.g. Twi Kasa Mmra	10
1	
2	
3	
4	
5	
6	

(9).

Do you personally teach a Ghanaian language as a subject?		Yes	No
	Valid cases	Percent	Percent
	N=387	282	105

10. If you answer "No", why do you not teach a Ghanaian language as a subject?

.....

.....

.....

.....

(11). If you answered "Yes" to question 9, Please estimate the percentage of the Ghanaian language text book which you will have covered by the end of the year.

	0-20 %, very little	21-40 % little	41-60 % average	61- 80 % above average	81-100 % Excellent
Valid cases	freq.	freq.	freq.	freq.	freq.
Total	43	55	124	52	7
N=281					

(12). Please estimate the percentage of your pupils that can perform each of the following language skills appropriate to their level in Ghanaian language.

Percentage of class that can perform skill in Ghanaian language						
	Valid Cases	0-20 % very few	21-40% few	41-60% some	61-80% many	81-100% All or almost all
Language Skills		freq.	freq.	freq.	freq.	freq.
1.Read science text for the class and understand	N=333	69	72	119	65	8
2.Write descriptive essays about themselves with comprehension	N=336	82	100	112	38	4
3.Talk about everyday activities in class with comprehension	N=337	28	57	89	125	38
4.Listen to teacher's lecture on science with comprehension	N=333	36	48	96	110	43
5.copy science notes from the bb correctly	N=334	25	24	59	154	72
6.Take notes during lecture correctly	N=332	140	86	72	25	9

Q13).

Do you have books for teaching English language in your school for your class?	Valid cases	Yes	No
	Total	freq.	freq.
	N= 391	357	34

(14). Please list the titles and quantities of books you have in your school for teaching English language subject in your class.

Class

(If you teach a combined class prepare that of each class separately)	
Title of books	Quantities
e.g. English for primary schools Pupils' book 3	20
1	
2	
3	
4	
5	

(15). Please estimate the percentage of the English language text book you will have read with your class by the end of the year.

	0-20 %,	21-40 %	41-60 %	61- 80 %	81-100 %
Valid cases	very little	little	average	above average	Excellent
Total	freq.	freq.	freq.	freq.	freq.
N =384	22	43	168	127	24

(16). Please estimate the percentage of your pupils that can perform each of the following language skills appropriate to their level in English language.

	Percentage of class that can perform skill in English language					
	Valid Cases	0-20 % very few	21-40% few	41-60% some	61-80% many	81-100% All or almost all
. Language Skills	Total	freq.	freq.	freq.	freq.	freq.
1.Read science text for the class and understand	N= 392	32	94	161	96	9
2. Write descriptive essays about themselves with comprehension	N=389	64	97	142	76	10
3.Talk about everyday activities in class with comprehension	N= 388	42	73	153	103	17
4.Listen to teacher's lecture on science with comprehension	N=385	23	67	140	123	32
5.copy science notes from the bb correctly	N= 398	4	24	88	166	101
6.Take notes during lecture correctly	N= 380	128	104	86	45	17

Section B: Language Attitude.

INSTRUCTION

In the following section, please select from one of the options provided the idea that best represent your own view. For each question, tick the appropriate column.

(Q.17). The uses of Ghanaian language as medium of instruction in classes one to three contributes to primary school pupils' poor academic performance in English.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N= 391	87	140	28	111	25

(Q 18). I did not receive adequate training in how to teach Ghanaian language during their teacher training.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=381	42	82	17	163	77

(Q 19). I will not want to become Ghanaian language teachers because such teachers are not respected

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=391	18	19	14	154	186

(Q 20). The use of a Ghanaian language medium of instruction throughout the primary school will be improve Basic Education Examination results.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=393	9	22	14	178	170

(Q 21). A Ghanaian language should be the sole medium of instruction in the six years of Basic primary education

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=393	9	8	3	147	226

(Q 22). Only one Ghanaian language should be taught in all Ghanaian primary schools

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=392	23	49	5	152	163

(Q.23) English language should be the sole medium of instruction in the six years Basic Primary Education.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=393	106	123	23	113	28

(Q 24). School children in each region should learn only one dominant language of the region

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=392	59	161	23	109	40

(Q.25). Posting of newly trained teachers should be to their home regions to enable them to teach Ghanaian language.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=393	58	142	19	125	49

(Q.26). Posting of teachers should be outside their home regions to force them to speak English to their pupils most of the school time.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=393	68	152	37	110	26

(Q.27). The practice where all primary school teachers teach both English and a Ghanaian language should be stopped.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N= 390	56	85	26	159	64

(Q.28). Primary school teachers should have official permission to use both Ghanaian language and English in each lesson as medium of instruction. i.e. teachers should be allowed to translate, code mix and code switch in the two languages.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=391	34	163	26	133	35

(Q.29). A pass in a Ghanaian language should be a condition for promotion of primary school teachers.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=391	18	105	34	142	92

(Q.30). A pass in a Ghanaian language should be a condition for admission to Junior secondary school (J.S.S) pupils to the Senior secondary school (S.S.S).

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=389	28	148	24	139	50

(Q.31). A pass in English language should remain a condition for admission to the senior secondary school (S.S.S.)

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N= 393	144	178	11	48	12

(Q.32). A pass in English language should remain a condition for admission of teacher trainees to colleges.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=388	146	180	8	36	18

(Q.33). A pass in Ghanaian language should be a condition for admission of teacher trainees.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=389	36	139	27	137	50

(Q.34). A pass in English language should remain a condition for admission of students to the university.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=388	151	162	10	38	27

(Q.35). Parents will be happy if primary school pupils are literate in Ghanaian language by the end of primary class six.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=388	55	168	35	95	35

(Q.35b). Parents will be happy if primary school pupils' are literate in English language by the end of primary class six.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=389	190	160	6	10	23

(Q.36). I combine English and Ghanaian language in most of my lessons in the primary school (i.e. I code mix and code switch between a Ghanaian language and English.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=384	23	200	23	116	22

(Q.37). I think that the combined use of English and Ghanaian Language(code -mixing and code switching) in a lesson is educationally beneficial to the pupils.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=390	42	211	35	86	16

Q.38). When pupils arrive in P4 from P3, I automatically switch from Ghanaian language medium of instruction to use of English as medium of instruction.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=386	79	223	25	58	1

(Q.39). I change from a Ghanaian language medium of instruction to English language medium simultaneously for all subjects in primary class four.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=384	32	170	22	148	12

(Q.40).I use my own personal judgement to change from Ghanaian language medium of instruction to English. The change is not simultaneous for all subjects.

	1	2	3	4	5
Valid cases	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Total	freq.	freq.	freq.	freq.	freq.
N=377	37	240	23	62	15

(Q.41). What language or languages do you personally use in carrying out the following activities?

L A N G U A G E S U S E D I N S C H O O L						
	Valid Cases	Always in Eng.	In Eng. more than L1	In Eng. & L1 Equally	More in L1 than Eng.	Always in L1
A C T I V I T I E S	Total	freq.	freq.	freq.	freq.	freq.
1.View or listen to your favourite radio or television programme	351	134	140	57	17	3
2.converse with a colleague of yours who also speaks your language on:						
a) family matters	367	15	16	50	129	157
b) day to day events e.g. politics	376	40	88	95	105	48
c) science and mathematics	376	130	161	61	16	8
converse with others at home	377	10	22	62	168	115
3.Buying and shopping in the market	376	12	19	68	146	131
4.Religious worship	376	42	40	77	104	113
5.Write personal letters	378	329	23	19	4	3
6.Write official letters	378	367	7	2	1	1
7.Read in your leisure hours	398	232	105	31	5	5

Section C: Personal Information.

(Q42).a).Region...10.....

b). District.....

c). Class you teach now..(1995/1996 academic year).....

valid cases	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Total	Percent	Percent	Percent	Percent	Percent	Percent
N=779	16.2	16.4	16.6	17.1	17.3	16.4

d). No of pupils in class in 1996.....

(Q43) Is your school in the rural area or urban?

Valid cases	Urban	Rural
Total	Percent	Percent
N=779	54	46

(Q 44). What is your sex? Please tick [☒] the appropriate box

Valid cases	Female	Male
	445	
767	58.0	42.0

(Q. 45). For how long have you been teaching?

Valid	1	2	3	4	5	6	7
cases	0-5 yr.	6-10 yr.	11-15 yr.	16-20 yr.	21-25 yr.	26-30 yr.	31+ years
766	29.2	25.8	8.5	7.3	16.4	9.1	3.5

Q.46)What teacher qualification do you have?

Frequency	Percent	Valid cases=764
10	1.2	Untrained Middle or secondary school Leavers (Pupil-Teachers)
5	0.6	Untrained High School/ 'A' Level Pupil-Teacher
2	0.3	Two-year Post Middle Certificate "B" Teachers
29	3.7	Two-year Post "B" Certificate "A" Teachers
578	74.0	Four-year Post-Middle Certificate "A" Teachers
9	1.2	Two-year Post Secondary Certificate "A" Teachers
127	16.3	Three-year Post secondary Certificate "A" Teachers
3	0.4	Three-year Specialist Teachers
1	0.1	Three-year Diploma Certificate Teachers
1	0.1	Professional Graduate Teachers

(Q. 47). Into which of the following age groups do you fall?

	1	2	3	4	5	6	7	8
Valid cases	Below 20	21-25 years	26-30 years	31-35 years	36-40 years	41-45 years	46- 50 years	50 & above
745	0.9	8.6	18.9	20.0	14.8	14.0	12.9	9.9

PRIMARY SCHOOL TEACHERS' LANGUAGE MEDIUM USE SURVEY 1966

SCHOOL	SCHOOL TYPE		SCHOOL LOCATION		SCHOOL DISTRICT	
	NAME	TYPE	VILLAGE	DISTRICT	REGION	COUNTRY
1
2
3
4
5
6
7
8
9
10

(1) In which language do you usually carry out the following functions at school?

FUNCTION	SCHOOL TYPE		SCHOOL LOCATION		SCHOOL DISTRICT	
	NAME	TYPE	VILLAGE	DISTRICT	REGION	COUNTRY
1. Teaching
2. Discipline
3. Administration
4. Socialization
5. Evaluation
6. Guidance
7. Other

Please complete the following:

Name of School: Parkosa R/C Prim.

What class do you teach? Six

Section A

How to answer this questionnaire

Answer the questions by putting a tick [✓] in the column or box which best matches your own opinion. For example,

- (1) In which language or languages do you mostly carry out the following functions in school?

TEACHER FUNCTIONS	LANGUAGES USED IN SCHOOL				
	Always in English	In English more often than Ghanaian language	In English & Ghanaian language equally	In Ghanaian language more often than English	Always in Ghanaian language
1. conduct morning prayer at the school assembly			✓		

Please start now

- (1) In which language or languages do you mostly carry out the following functions in school?

Please tick (✓) the language column that applies to the function in the checklist.

TEACHER FUNCTIONS	LANGUAGES USED IN SCHOOL				
	Always in English	In English more often than Ghanaian language	In English & Ghanaian language equally	In Ghanaian language more often than English	Always in Ghanaian language
1. Address an assembly of pupils			✓		
2. Send messages to parents through pupils					✓
3. Explain rules on how to play games and carry out activities during PE Lessons					
4. Comment on pupils' compound work				✓	
5. Assign pupils work in the school garden				✓	

(2) . In which language or languages do you mostly carry out the following functions in class?

Please tick (✓) the language column that applies to the function in the checklist

TEACHER FUNCTIONS	L A N G U A G E S U S E D I N C L A S S				
	Always in English	In English more often than Ghanaian language	In English & Ghanaian language equally	In Ghanaian language more often than English	Always in Ghanaian language
1. Introduce lesson topic to class			✓		
2. Present lesson content			✓		
3. Give explanations of content			✓		
4. specify examples	✓				
5. Give routine commands on discipline and classroom organisation			✓		
6. Give rubrics of class assignment e.g. explain task to be done			✓		
7. Give explanations of work on the board			✓		
8. Give instructions for home work			✓		
9. Explain meaning in a reading aloud lesson			✓		
10. Check understanding of new vocabulary, phrases and sentences			✓		
11. Talk to individual pupils in class			✓		
12. Talk to a group on group work in class			✓		
13 Provide corrections on errors in class			✓		
14. Send pupils on errands to other teachers or head teacher			✓		
15. Create humour in class			✓		
16. Praise pupils' work in class	✓				
17. Give summaries of lesson content			✓		

(3) . In which language or languages do you teach the following subjects?

Tick (✓) the language column that apply in the following checklist

SUBJECTS	L A N G U A G E S U S E D I N C L A S S				
	Always in English	In English more often than Ghanaian language	In English & Ghanaian language equally	In Ghanaian language more often than English	Always in Ghanaian language
English language		✓			
Ghanaian language					✓
Mathematics		✓			
Elementary Science		✓			
Life Skills			✓		
Agriculture Science			✓		
Social Studies			✓		
Cultural studies			✓		
Physical Education		✓			

(4). Please estimate the percentage of time you talk to your pupils in class in English in the following subjects.

Tick (✓) the column that applies in your situation in the checklist for English Language

Subject Taught	0-20 % never	21-40 % rarely	41-60 % sometimes	61- 80 % often	81-100 % very often
Mathematics				✓	
Elementary Science.				✓	
Life Skills				✓	
Cultural Studies				✓	

(5). Please estimate the percentage of time you talk to your pupils in class in Ghanaian Language in the following subjects.

Tick (✓) the column that applies in your situation in the checklist for Ghanaian language

Subject Taught	0-20 % never	21-40 % rarely	41-60 % sometimes	61- 80 % often	81-100 % very often
Mathematics					✓
Elementary Science					✓
Life Skills					✓
Cultural Studies					✓

(6). Please estimate the percentage of time you talk to your pupils in class in Mixed language (code mixing and code switching) in the following subjects.

Tick (✓) the column that applies in your situation in the checklist for Mixed language (code mixing and code switching)

Subject Taught	0-20 % never	21-40 % rarely	41-60 % sometimes	61- 80 % often	81-100 % very often
Mathematics				✓	
Elementary Science				✓	
Life Skills				✓	
Cultural Studies				✓	

(7). Do you have books for teaching Ghanaian language in your school for your class?

Tick (✓) the appropriate box that applies to your situation.

☒ Yes, (answer the next question)

☐ No, (skip the next question)

(8). Please list the titles and quantities of books you have in your school for teaching the Ghanaian language subject in your class. (Continue on a separate sheet if you have many books)

Class <u>SIX</u>	
(If you teach combined classes prepare that of each class separately)	
Titles of books	Quantities
e.g. Twi Kasa Mmara	10
1 Nindɛ Kwankwɛrɛ Book six	16
2 Twi Kasa Mmara	1
3	
4	
5	
6	

(9). Do you personally teach a Ghanaian language as a subject?

Please tick (✓) the box that applies to your situation.

☒ Yes, (skip the next question)

☐ No, (answer the next question)

10. If you answer "No", why do you not teach a Ghanaian language as a subject?

.....

.....

.....

.....

.....

.....

.....

.....

(11). If you answered "Yes" to question 9, Please estimate the percentage of the Ghanaian language text book that you will have covered by the end of the year.

Tick (✓) the appropriate column that applies to your situation.

0-20 % very little	21-40 % Little	41-60 % average	61- 80 % above average	81-100 % Excellent
	✓			

(12). Please estimate the percentage of your pupils that can perform each of the following language skills in Ghanaian language.

Tick (✓) the appropriate column that applies to your situation.

Percentage of class that can perform skill in Ghanaian language

Language Skills	0-20 % very few	21-40 % few	41-60 % some	61- 80 % many	81-100 % All or almost all
Read science text for the class and understand	✓				
write descriptive essays about themselves with comprehension	✓				
Talk about everyday activities in class with comprehension	✓				
Listen to teacher's lecture on science with comprehension	✓				
copy science notes from the bb correctly				✓	
Take notes during lecture correctly	✓				

(13). Do you have books for teaching English language in your school for your class?

Tick (✓) the appropriate box that applies to your situation.

☒ Yes, (answer the next question)

☐ No, (skip the next question)

(14). Please list the titles and quantities of books you have in your school for teaching English language subject in your class. (Continue on a separate sheet if you have many books)

Class: <u>SIX</u>	
(If you teach combined classes prepare that of each class separately)	
Titles of books	Quantities
e.g. English for Primary School Pupils' Book 3	20
1 <u>An English Course for Ghanaian schs. Bk-5</u>	5
2	
3	
4	
5	

(15). Please estimate the percentage of the English language text book you will have read with your class by the end of the year.

Tick (✓) the appropriate column that applies to your situation.

0-20 %	21-40 %	41-60 %	61- 80 %	81-100 %
very little	little	average	above average	Excellent
✓				

(16). Please estimate the percentage of your pupils that can perform each of the following language skills appropriate to their level in English language.

Tick (✓) the appropriate column that applies to your situation.

Percentage of class that can perform skill in English language

Language Skills	0-20 % very few	21-40 % few	41-60 % some	61- 80 % many	81-100 % All or almost all
Read science text for the class and understand	✓				
write descriptive essays about themselves with comprehension	✓				
Talk about everyday activities in class with comprehension	✓				
Listen to teacher's lecture on science with comprehension	✓				
copy science notes from the bb correctly				✓	
Take notes during lecture correctly	✓				

SECTION B:

INSTRUCTION

In the following section, please select from one of the options provided the idea that best represent your own view. For each question, tick the appropriate column.

(Q.17). The uses of Ghanaian language as medium of instruction in classes' one to three contributes to primary school pupils' poor academic performance in English.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
		✓		

(Q 18). I am unable to teach Ghanaian language properly because I did not receive adequate training in how to teach Ghanaian language during my teacher training.

Tick (✓) the appropriate column that best represents your own view

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
				✓

(Q 19). I will not want to become a Ghanaian language teacher because such teachers are not respected

Tick (✓) the appropriate column that best represents your own view:

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
				✓

(Q 20). The use of a Ghanaian language medium of instruction throughout the primary school will improve Basic Education Examination results.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
			✓	

(Q 21). A Ghanaian language should be the sole medium of instruction in the six years of Basic primary education.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
			✓	

(Q 22). Only one Ghanaian language should be taught in all Ghanaian primary schools

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
			✓	

(Q.23) English language should be the sole medium of instruction in the six years of Basic Primary Education

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
			✓	

(Q 24). School children in each region should learn only one dominant language of the region.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
	✓			

(Q.25). Postings of newly trained teachers should be to their home regions to enable them teach Ghanaian language.

Tick (✓) the appropriate column that best represents your own view

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
	✓			

(Q.26). Postings of teachers should be outside their home regions to force them to speak English to their pupils most of the school time.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
			✓	

(Q.27). The practice where all primary school teachers teach both English and a Ghanaian language should be stopped

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
			✓	

(Q.28). Primary school teachers should have official permission to use both Ghanaian language and English in each lesson as medium of instruction. (i.e. teachers should be allowed to translate, code mix and code switch in the two languages.)

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
	✓			

(Q.29). A pass in a Ghanaian language should be a condition for promotion of primary school teachers.

Tick (✓) the appropriate box column best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
			✓	

(Q.30). A pass in a Ghanaian language should be a condition for admission to Junior secondary school (J.S.S) pupils to the Senior secondary school (S.S.S).

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
			✓	

(Q.31). A pass in English language should remain a condition for admission to the senior secondary school (S.S.S.)

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
	✓			

(Q.32). A pass in English language should remain a condition for admission of teacher trainees to colleges.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree ✓	I neither agree nor disagree	I disagree	I strongly disagree

(Q.33). A pass in Ghanaian language should be a condition for admission of teacher trainees.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree ✓	I neither agree nor disagree	I disagree	I strongly disagree

(Q.34). A pass in English language should remain a condition for admission of students to the university.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree ✓	I agree	I neither agree nor disagree	I disagree	I strongly disagree

(Q.35). Parents will be happy if primary school pupils' are literate in Ghanaian language by the end of primary class six.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree ✓	I neither agree nor disagree	I disagree	I strongly disagree

(Q.35b). Parents will be happy if primary school pupils' are literate in English language by the end of primary class six.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree ✓	I agree	I neither agree nor disagree	I disagree	I strongly disagree

(Q.36).I combine English and Ghanaian languages in most of my lessons in the primary school. (i.e. I code mix and code switch between a Ghanaian language and English.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree or disagree	I disagree	I strongly disagree
	✓			

(Q.37).I think that the combined use of English and Ghanaian Language(code-mixing and code switching) in a lesson is educationally beneficial to the pupils.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
✓				

Q.38). When pupils arrive in P4 from P3, I automatically switch from Ghanaian language medium of instruction to use of English as medium of instruction.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
			✓	

(Q.39). I change from a Ghanaian language medium of instruction to English language medium simultaneously for all subjects in primary class four.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
			✓	

(Q.40).I use my own personal judgement to change from Ghanaian language medium of instruction to English. The change is not simultaneous for all subjects.

Tick (✓) the appropriate column that best represents your own view.

1	2	3	4	5
I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
	✓			

(Q.41). What language or languages do you personally use in carrying out the following activities?

Tick (✓) the language column that apply in the following checklist

ACTIVITIES	LANGUAGES USED				
	Always in English	In English more than Ghanaian language	In Ghanaian language & English equally	In Ghanaian language more than English	Always in Ghanaian language
View or listen to your favourite radio or television programme				✓	
converse with a colleague of yours who also speaks your language on :					
a) family matters					✓
b) day to day events e.g. politics					✓
c) science and mathematics			✓		
converse with others at home				✓	
buying and shopping in the market				✓	
religious worship					✓
write personal letters	✓				
write official letters	✓				
read in your leisure hours	✓				

Section C: Personal Information.

- (Q42). a). Region..... A S HANTI
- b). District..... KUMASI
- c). Class you teach now.(1995/1996 academic year)..... SIX
- d) Name of school..... PARKOSO R.I.C. PRIMARY
- e). No. of pupils in class in 1996..... SIXTEEN

(Q43) Is your school in the rural area or urban?

Tick (✓) the appropriate box.

- ☒ Urban school
- ☐ Rural school

(Q 44). What is your sex? Please tick the appropriate box

- ☒ Female
- ☐ Male

(Q. 45). For how long have you been teaching?

Tick (✓) the appropriate column.

1	2	3	4	5	6	7
0-5 years	6-10 years	11-15 years	16-20 years	21-25 years	26-30 years	31+ years
			✓			

(Q. 46) What teacher qualification do you have?

Tick (✓) the appropriate box in the checklist(If your qualification is not listed please add it).

- a) ☐ Untrained Middle or secondary school Leavers (Pupil-Teachers)
- b) ☐ Untrained High School or 'A' Level Pupil-Teacher
- c) ☐ Two-year Post Middle Certificate "B" Teachers
- d) ☐ Two-year Post "B" Certificate "A" Teachers
- e) ☒ Four-year Post-Middle Certificate "A" Teachers
- f) ☐ Two-year Post Secondary Certificate "A" Teachers
- g) ☐ Three-year Post secondary Certificate "A" Teachers
- h) ☐ Three-year Specialist Teachers
- i) ☐ Three-year Diploma Certificate Teachers
- j) ☐ Non-professional graduate Teachers
- k) ☐ Professional Graduate Teachers
- l) ☐

Tick (✓) the appropriate category.

1	2	3	4	5	6	7	8
20 and below	21-25 years	26-30 years	31-35 years	36-40 years	41-45 years	46- 50 years	50 & above
				✓			

Seidu Al-Hassan

P. O. Box 3041

Kumasi

[illegible]

Appendix 9f

General Results: Language Attitudes

The Frequency of Responses to Language Attitude Items

Items	SA	A	NAND	D	SD
1. The uses of Ghanaian language as medium of instruction in classes one to three contributes to primary school pupils' poor academic performance in English.	20.2	34.2	6.6	31.3	7.7
2. I am unable to teach Ghanaian language properly because I did not receive adequate training in how to teach Ghanaian language during my teacher training.	11.7	21.5	5.0	41.9	19.9
3. I would not want to become Ghanaian language teacher because such teachers are not respected	3.8	4.7	3.2	40.3	48.0
4. The use of a Ghanaian language medium of instruction throughout the primary school will improve Basic education examination results.	3.2	8.3	3.7	43.8	41.0
5. A Ghanaian language should be the sole medium of instruction in the six years of Basic primary education	2.3	4.4	1.6	41.8	49.9
6. Only <u>one</u> Ghanaian language should be taught in all Ghanaian primary schools.	4.5	11.9	1.7	40.8	41.1
7. English language should be the sole medium of instruction in the six years of Basic Primary Education	21.3	33.4	6.2	31.9	7.2
8. School children in each region should learn only one dominant language of the region	12.2	41.8	4.2	31.6	10.2
9. Posting of newly trained teachers should be to their home regions to enable them teach Ghanaian language.	12.7	36.9	4.1	34.8	11.5
10. Posting of teachers should be outside their home regions to force them to speak English to their pupils most of the school time.	15.8	39.4	8.6	31.1	5.1
11. The practice where all primary school teachers teach both English and a Ghanaian language should be stopped	11.3	19.3	5.5	46.4	17.6
12. Primary school teachers should have officially permission to use both Ghanaian language and English in each lesson as medium of instruction (i.e. Teachers should be allowed to translate, code mix and code switch in the two languages).	7.7	47.5	6.8	31.1	6.9

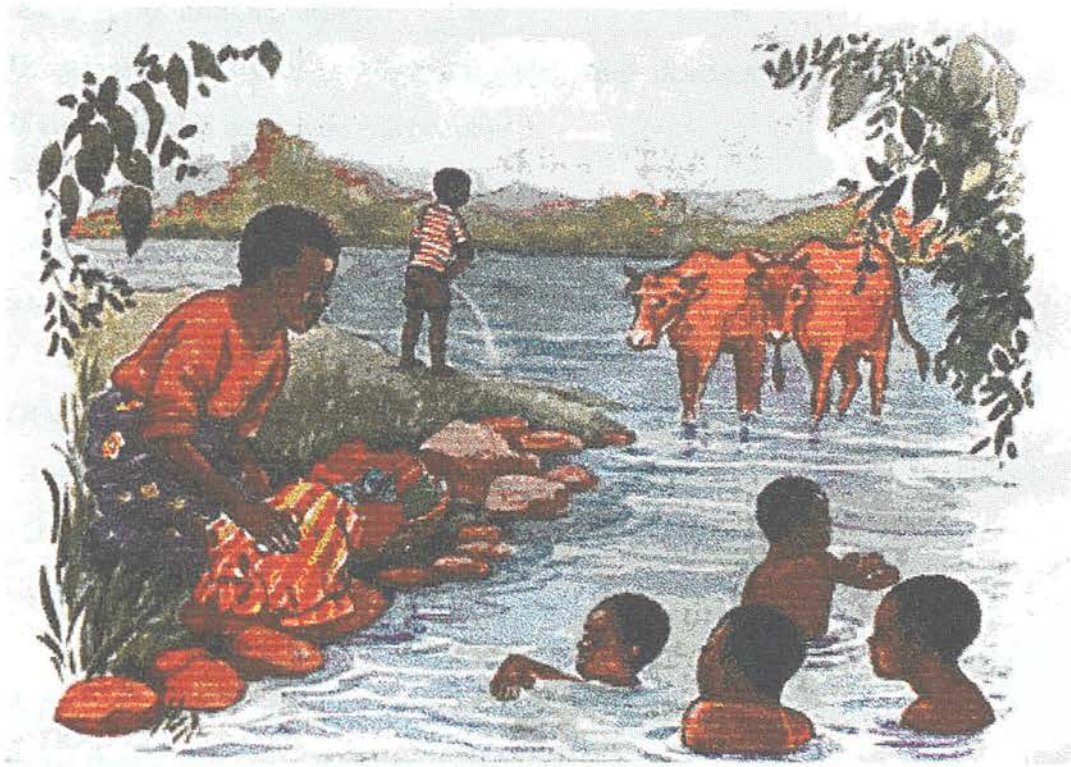
13. A pass in a Ghanaian language should be a condition for promotion of primary school teachers.	3.6	29.8	8.6	38.5	19.5
14. A pass in a Ghanaian language should be a condition for admission to Junior secondary school (J.S.S) pupils to the Senior secondary school (S.S.S).	6.1	38.6	6.5	37.7	11.1
15. A pass in English language should remain a condition for admission to the senior secondary school (S.S.S.)	34.2	51.4	1.9	10.0	2.5
16. A pass in English language should remain a condition for admission of teacher trainees to colleges.	36.7	50.9	1.9	7.4	3.2
17. A pass in Ghanaian language should be a condition for admission of teacher trainees.	8.3	36.7	7.3	36.6	11.0
18. A pass in English language should remain a condition for admission of students to the university.	37.1	46.8	2.4	8.7	5.1
19. Parents will be happy if primary school pupils are literate in Ghanaian language by the end of class six.	11.8	45.7	8.7	25.8	8.0
20. Parents will be happy if primary school pupils are literate in English language by the end of class six.	43.8	47.0	1.2	3.8	4.2
21. I combine English and Ghanaian language in most of my lessons in the primary school(i.e. I code mix and code switch between a Ghanaian language and English).	6.2	62.5	5.3	22.4	3.7
22. I think that the combined use of English and Ghanaian Language(code-mixing and code switching) in a lesson is educationally beneficial to the pupils.	11.5	61.7	6.7	17.0	3.1
23. When pupils arrive in P4 from P3, I automatically switch from Ghanaian language medium of instruction to use of English as medium of instruction.	18.8	60.5	5.4	14.5	0.8
24. I change from a Ghanaian language medium of instruction to English language medium is done simultaneously for all subjects in primary class four.	7.6	49.8	6.1	33.7	2.8
25. I use my own personal judgement to change from Ghanaian language medium of instruction to English. The change is not simultaneous for all subjects	7.7	64.3	4.7	20.7	2.5

Language Proficiency Test Original Passage used for Cloze Test

KEEPING HEALTHY

Water.

Our bodies need water. The water we drink must be clean. We get diseases from dirty water. Look at this picture.



Why is this water not clean?

Would you take your drinking water from this place?

You should always use a latrine.

You should never urinate or defecate into or near a river

Would you take your drinking water from the places shown in the picture?

How do you make sure that the water you drink is clean?

The best way is to boil the water for some time.

You can use special chemicals to make the water clean.

Some people filter the water to make it clear. This water must still be boiled to kill the tiny living things which can make you ill.

The water which we use to wash ourselves and our clothes must be clean too.

The water which we use to wash our food must be as clean as our drinking water.

Dirty water has tiny living things in it which cause diseases.

If you drink this water you can become ill.

The tiny living things grow in our body.

Some of them are worms. These grow inside your legs

This makes your legs very painful.

Other worms from dirty water make you urinate blood.

Other diseases which you get from dirty water give you very bad stomach pains and diarrhoea.

People can die from these diseases.

A person with one of these diseases can put the tiny living things back into the water. This happens when the person washes himself. It also happens when he passes urine or faeces near the water

A person who is not ill can then get the disease

You must not drink dirty water

You must not wash yourself in dirty water

You must not swim in rivers or ponds.

APPENDIX 10(b): Language Proficiency Cloze Test English Version

INSTRUCTIONS:

In the following passage a number of words have been removed.

The numbered blank spaces show where single words have been removed.

Read the passage carefully. Try to understand what it is about.

Then look at each number and complete the blank with only ONE WORD.

Write down the answer ON THE ANSWER SHEET PROVIDED

EXAMPLE:

We need food to stay alive. We need food to give us energy.

Children need food to grow.

If we do not have enough --1--we become weak and ill.

We --2--different types of food. If you --3--the same food all the time --4--will not be strong and healthy.

ANSWERS:

1 food

2 need

4 eat

4 you

In number (1), some food is wrong because you must use only ONE WORD

DO NOT OPEN TO THE NEXT PAGE

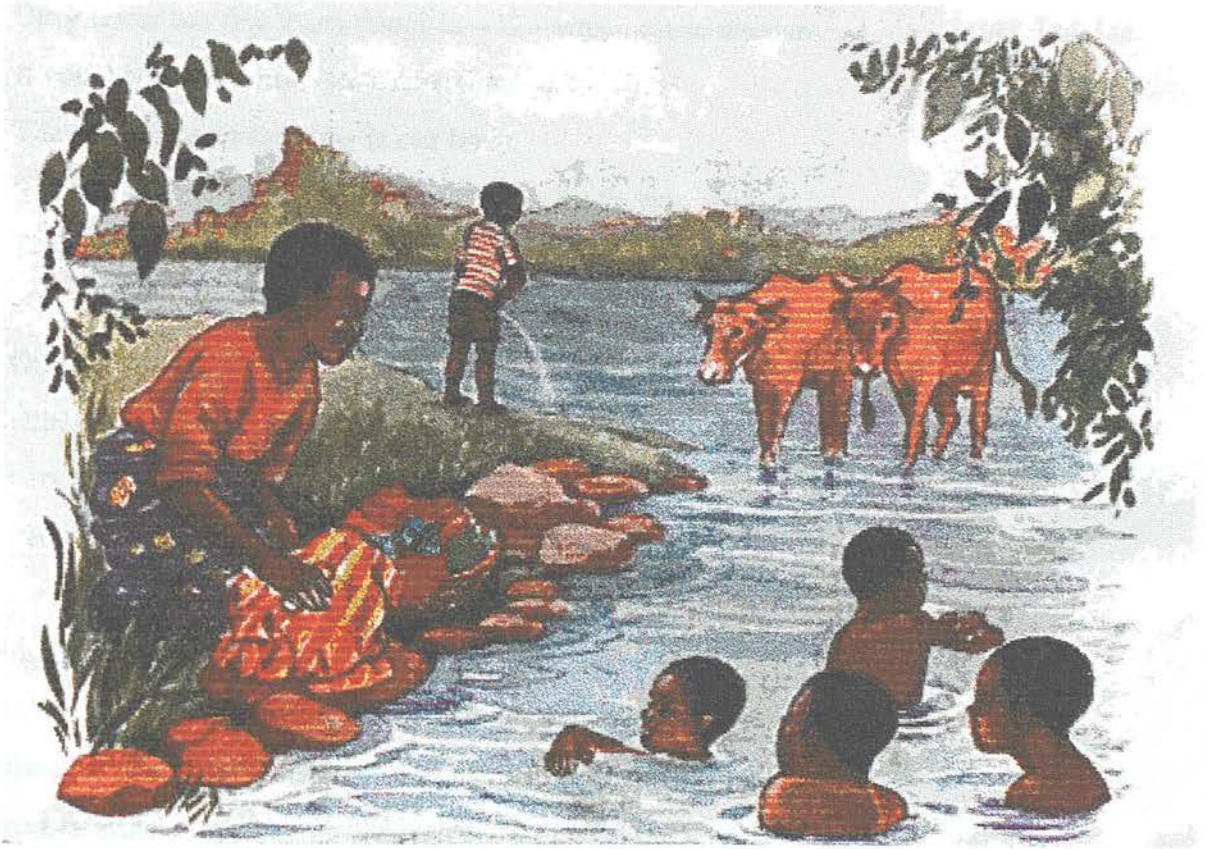
UNTIL YOU ARE TOLD TO DO SO.

DO NOT WRITE ANYTHING ON THIS QUESTION PAPER

KEEPING HEALTHY

Water.

Our bodies need water. The water we drink must be clean. We get diseases from dirty water.. Look at this picture.



Why is this water not clean?

Would you take your drinking --1-- from this place?

You should always use a latrine.

You should --2-- urinate or defecate into or near a river

Would you take --3-- drinking water from the places shown in the picture?

How do --4-- make sure that the water you drink is clean?

The best --5-- is to boil the water for some time.

You can use --6-- chemicals to make the water clean.

Some people filter the water --7-- make it clear. This water must still be boiled to kill --8-- tiny living things which can make you ill. The water which --9-- use to wash ourselves and our clothes must be clean too.

--10-- water which we use to wash our food must be as

--11-- as our drinking water.

Dirty water has tiny living things in --12-- which cause diseases.

If you drink this water you can become --13--

The tiny living things grow in our body.

Some of them --14-- worms. These grow inside your legs

This makes your legs very --15--

Other worms from dirty water make you urinate blood.

Other diseases --16-- you get from dirty water give you

very bad stomach pains --17-- diarrhoea.

People can die from these diseases.

A person with one --18-- these diseases can put the tiny

living things back into the --19-- . This happens when

the person washes himself. It also happens when --20--

passes urine or faeces near the water

A person who is not ill can then get the disease

You must not drink dirty water

You must not wash yourself in dirty water

You must not swim in rivers or ponds.

APPENDIX 10(c) : Language Proficiency Test

Sample Answer Sheet for English

Write down all your answers on this answer sheet

You are reminded not to write on the question booklet

Name.....

School.....

- | | |
|----|----|
| 1 | 11 |
| 2 | 12 |
| 3 | 13 |
| 4 | 14 |
| 5 | 15 |
| 6 | 16 |
| 7 | 17 |
| 8 | 18 |
| 9 | 19 |
| 10 | 20 |

APPENNDIX 10(d) Language Proficiency Test

TRANSLATED GHANAIAN LANGUAGE VERSION OF ORIGINAL
ENGLISH TEXT.

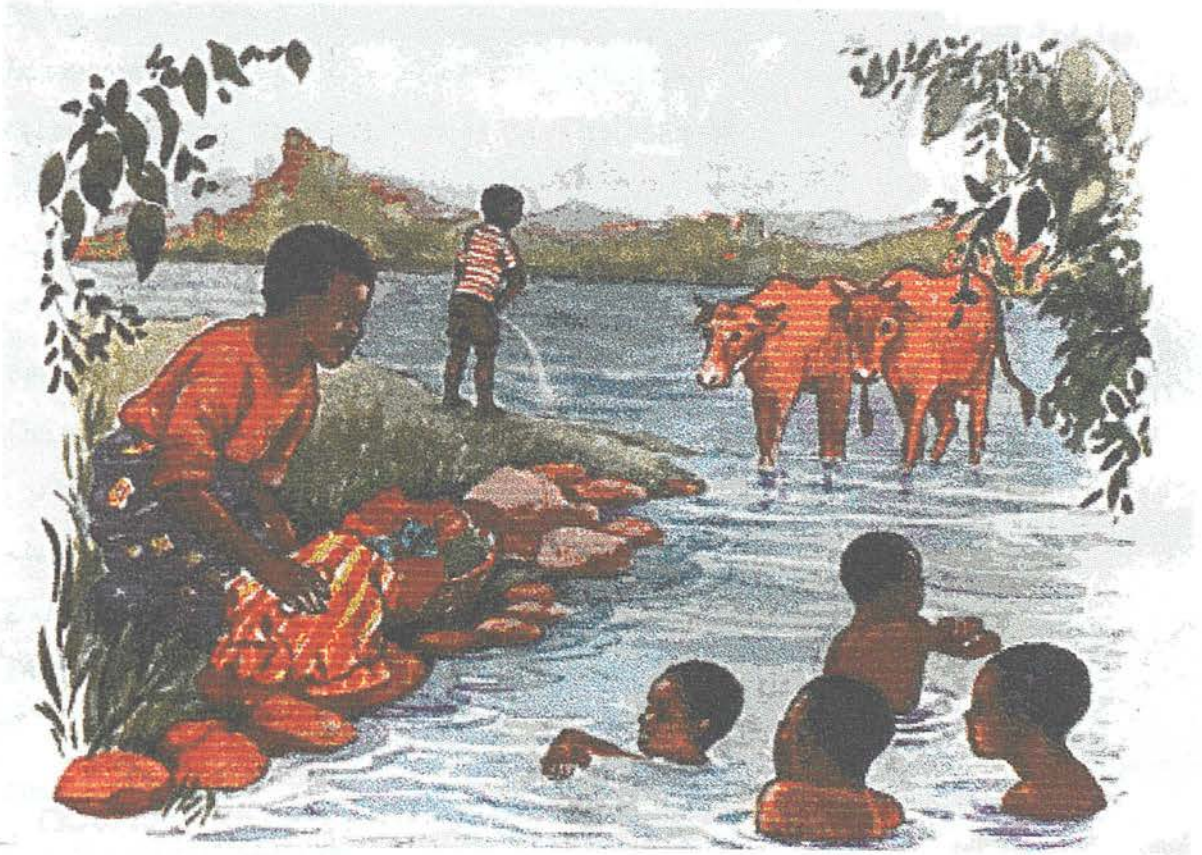
AHONIDIE APOMUDEN

Nsuo.

Yen Nnipadua hia nsuo. eɛɛ sɛ yen nsuo a yɛnom ho tɛɛ.

Yɛnya yadɛɛ firi nsu fii mu.

Hwɛ saa nfonini yi.



Aden nti na saa nsuo yi ani ntɛɛ?

Wu bɛsa wo nsuo a wonom afiri saa beaɛ ha?

eɛɛ sɛ abɛɛ biara yɛkɔ tiafi so

Ense sɛ wodwonsɔ anaa sɛwonne nsuteneɛ mu anaa ɛho

Wobesa wo nsuo a wobɛnom afiri saa beaɛ a ɛwɔ nfonini yi mu?

Wobeye den ahunu se nsuo a wobenom no ho te?

Kwan a eye pa ara ne se wobenoa nsuo no emmere kakra.

Wobetumi de nnuro soronko bi ati nsuo nu ani.

ebinom sone so se nsuo no ani betee. Wobek so anoa saa nsuo no se ebeye a emu mmoawamoawa no a ebema wo yadee no bewu.

ese se yen nsuo a yede dware, hohoro yen nneema, nso ho betee.

Nsuo a yede hohoro ya aduane ho nso ese se eho tee tesse nea yenom nnoa ara

Nsufii ew mmoa nketenkete w mua ema yadee.

Se wo nom saa nsuo yi bia, wobetumi ayare.

Saa mmoa nketenkete yi nyini ew yen nnipadua mu.

ebi ne nsonosono. Nsonosono yi bi enyini ewo ye nan mu.

etumi ma wo nan no ye woya yie.

Nsonosono bi a ew saa nsufii yi mu tumi ma wodwons mmogya.

Nyarewa ahodo binom a ye nya firi nsufii mu ne yamkeka ne yamtuo denden.

Saa nyarewa yi betumi akum nnipa

Obi a w w saa yadee yi betumi ede mmoa nketenkete no asan akogu nsuo no mu bio.

etumi ba no saa, se onipa no dware nsuo no mua.

etumi ba saa nso, se dwons anaa se gya na'ann ben nsuo no aa.

Obi a onni saa yadee no bi no, betumi anya bi.

ense se wonom nsufii

ense se wodware nsufii mu

nse se wodware nsutene anaa nsuo tae mu.

APPENDIX 10 (e)

Translated Language Proficiency Cloze Test in Ghanaian Language (Twi)

NTWERε SAA ASEM MMISA YI SO

Saa nsem yi mu, nsem bebreε wε hε a yeayiyi afiri mu.

Baabia yagyigya hε no kyere nsem mmaako, mmaako a woayiyi afiri mu.

To wo boase na kan. Bε mmεden na te aseε wε sεnaa εkyere mu.

Fa asem baako hye baabi ara yagyigya no.

Twer mmuaεε no wε mmuaεε krataa no wεde ama woε no so.

NHWεSOε(example)

Yehia aduane de atena ase. Yehia aduane de anya ahoεden. Nkwadaa hia aduane de anyini.

Sε yeannya aduane dodoε a yεbeyε mre na yeayare.

Yehia nduane ahodoε. Sε wodi aduane korε dabiaraa, won nya ahoεnden.

MMUAYε

1. mre paa
2. wodi
3. apomuden

Sε wofa deε edikan no ara, “mre paa” εnye, εfiri sε εsε sε wofa asem baako pε.

MMUE AKYIRE, AGYE Sε YEAKA AKYERε WO ANSA

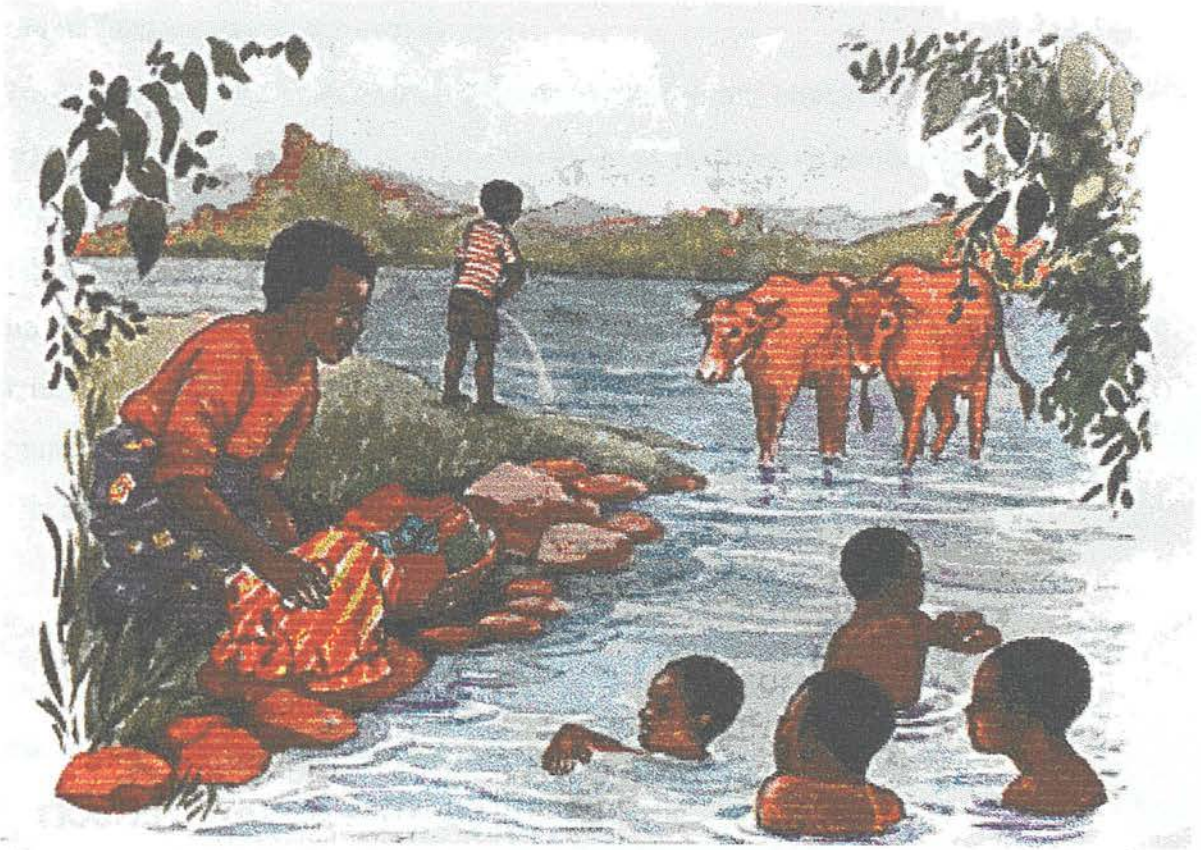
AHONIDIE APOMUDEN

Nsuo.

Yen Nnipadua hia nsuo. ese se yen nsuo a yenom ho tee.

Yenya yadee firi nsu fii mu.

Hwe saa nfonini yi.



Aden nti na saa nsuo yi ani ntee?

Wu besa wo nsuo a **wonom**¹ afiri saa beae ha?

ese se abere biara yek tiafi so

Ense **se**² wodwons anaa sewonne nsutenee mu anaa eho

Wobesa wo nsuo a **wobenom**³ afiri saa beae a ew nfonini yi mu?

Wobeye den ahunu se **nsuo**⁴ a wobenom no ho te?

Kwan a eye pa ara ne se **wobenoa**⁵ nsuo no emmere kakra.

Wobetumi de nnuro soronko bi ati nsuo nu **ani**⁶.

ebinom s ne so se nsuo no ani betee. Wobek so anoa saa **nsuo**⁷ no se ebeye a

emu mmoawamoawa no a ebema wo yadee no **bewu**⁸

ese se yen nsuo a yede dware, hohoro yen nneema, nso ho **bete**⁹.

Nsuo a yede hohoro ya aduane ho nso ese se eho tee tesse **nea**¹⁰ yenom nnoa ara

Nsufii ewo mmoa nketenkete wo mua ema yadee.

Se wo nom **saa**¹¹ nsuo yi bia, wobetumi ayare.

Saa mmoa nketenkete yi nyini ewo yen **nnipadua**¹² mu.

ebi ne nsonosono. Nsonosono yi bi enyini ewo ye nan mu.

etumi¹³ ma wo nan no ye woya yie.

Nsonosono bi a **ewo**¹⁴ saa nsufii yi mu tumi ma wodwonso mmogya.

Nyarewa ahodo binom **a**¹⁵ ye nya firi nsufii mu ne yamkeka ne yamtuo denden.

Saa nyarewa **yi**¹⁶ betumi akum nnipa

Obi a wo wo saa yadee yi betumi ede **mmoa**¹⁷ nketenkete no asan akogu nsuo no mu bio.

etumi ba no saa, **se**¹⁸ onipa no dware nsuo no mua.

etumi ba saa nso, se **dwons**¹⁹ anaa se ogya na'ann ben nsuo no aa.

Obi a onni saa **yadee**²⁰ no bi no, betumi anya bi.

ense se wonom nsufii

ense se wodware nsufii mu

nse se wodware nsutene anaa nsuo taee mu.

APPENDIX 10(f) : Language Proficiency Test

SAMPLE ANSWER SHEET FOR TWI

MMUAYɛ KRATAA

Twerɛ wo mmuayɛ nyinaa wɔ mmuayɛ krataa yi so

Yɛrekae wo sɛ ntwɛrɛ asem mmisa krataa no so

Me din de.....

Me sukuu de.....

1 wonom

2 sɛ²

3 wobɛnom³

4 nsuo⁴

5 wobɛnoa⁵

6 ani⁶

7 nsuo⁷

8 bɛwu⁸

9 bɛtɛɛ⁹

10 nea¹⁰

11 saa¹¹

12 nnipadua¹²

13 ɛtumi¹³

14 ɛwɔ¹⁴

15 a¹⁵

16 yi¹⁶

17 mmoa¹⁷

18. sɛ¹⁸

19 ɔdwonsɔ¹⁹

20 yadɛɛ²⁰

Appendix. 11: Pupils Reading Comprehension Test Results

11(a) School: Aborfo Results

Code Name	Eng.	Twi	Total
1. Emanuel Adu Donkor	7	7	14
2. George Manu	2	1	3
3. Naadu Laryea	8	13	21
4. Akwasi Apraku Agyepong	13	7	20
5. Akua Fremah Agyei	8	6	14
6. Nana Amponsah Ntim	11	15	26
7. Gertrude Boamah	1	1	2
8. Denies Akwasi William	1	2	3
9. Sandra-Ampadu Asiamah	5	5	10
10. Agyei Konadu Bridgett	9	5	14
11. Akua Asamoah Kwarteng	10	8	18
12. Owusu Sekyer Kwaku	5	8	13
13. George Mensah	6	0	6
14. Antwi Dominic	5	2	7
15. Coleman Rebecca Sylvia	7	7	14
16. Akyew Michael	0	1	1
17. Osei-Agyeman Prempeh Agnes	6	8	14
18. Badu Samuel	5	5	10
19. Kwarteng Amoateng Claudia	7	10	17
20. Karikari Akosua	2	0	2
21. Appiah Joyce Addison	13	14	27
22. Frimpong Perpetua	5	1	6
23. Kamkam Theophilus	6	1	7
24. Agyepong Ernest	1	0	1
25. Dankwa Godfred	0	0	0
26. Nyantakyiwaah Afia	4	0	4
27. Anokye Bempa Albert	11	11	22
28. Kyei Ampong Kwame	12	14	26
29. Owusu Ansah Emilia	1	1	2
30. Forkuo Kyerewaah Adeline	5	6	11
31. Oti Duruwaa Yaa	6	10	16
32. Bridgett Boateng	2	1	3
33. Adu Patricia	1	0	1
34. Appiagyei Bemah Yaa	5	0	5
35. Antwi Adomako B. Justice	6	1	7
36. Tawia Rosa Marie	2	0	2
37. Owusu Mensah Prince	3	5	8
38. Adu Anyan Anthony	2	1	3
39. Duodo Yaw Wiafe	6	5	11
40. Duodo Kwaku Vincent	8	4	12
41. Opoku Sylvester	4	1	5
42. Achampong Derrick	4	0	4

43. Adu Antwi Boasiako	1	0	1
44. Owusu Ann Shirley	5	10	15
45. Boakye Faustina	4	6	10
46. Okyere Boateng Yaw	6	0	6
47. Adusei Ellen	15	12	27
48. Karim Samira	6	10	16
49. Aidoo Kim- Louisa	4	3	7
50. Antwi David	2	0	2
51. Ankomah Serwah	2	4	6
52. Ato Sarsah Sampson	7	10	17
53. Owusu Ansah Derrick	6	1	7
54. Opoku Ware Kwame	6	11	17
55. Nkansa Esther	3	1	4
56. Appiah Dora Ofori	4	4	8
57. Asamoah Bonsu Philip	4	1	5
58. Sagoe E Diana	1	0	1
59. Ocloo Jane Setor	6	8	14
60. Owusu Ansah Emmanuel	1	4	5
61.. Addo Agyekum Kwaku	6	4	10
Total	314	276	590
Average/mean score	5.1	4.5	4.76

Appendix. 11: Pupils Reading Comprehension Test Results

11(b) Zongo Borɔfo Primary Results

Code Name	Eng.	Twi	Total
1. Adusei Ruth	0	0	0
2. Adutum Michael	0	0	0
3. Boateng Patricia	0	0	0
4. Oppong Samuel	0	0	0
5. Abboah Felix	1	0	1
6. Tabuaa Gladys	1	0	1
7. Owusu Clement	0	0	0
8. Osei Constance	0	0	0
9. Frempong Isaac	0	0	0
10. Agyei Kwarteng Prince	1	0	1
11. Owusu Alfred	0	1	1
12. Dabora Gilbert	0	0	0
13. Mansah Comfort	1	1	2
14. Yeboah Ennoch	0	9	9
15. Serwah Catharine	2	0	2
16. Boakye Opoku Emmanuel	0	1	1
17. Betty Hagan	0	0	0
18. Amanfo Ofori Collins	2	0	2
19. Antwiwaa Christiana	0	0	0
20. Owusu Nimako Elvis	0	1	1
21. Agyeman Anita	0	1	1
Total	8	14	22
Average /mean score	0.38	0.67	0.52

Appendix. 11: Pupils Reading Comprehension Test Results

11(c) Makaranta Borɔfo Primary Results

Code Name	Eng.	Twɪ	Total
1. Agyeiwaah Yaa	0	0	0
2. Adams Obeng	1	0	1
3. Adusei Clement	0	0	0
4. Amoako Kwadwo	0	0	0
5. Adjei Akwasi Jonas	0	0	0
6. Akyaa Vida	7	7	14
7. Serwah Akua	2	0	2
8. Sarfo Esther	0	0	0
9. Fourdjour Emelia	2	0	2
10. Adu Felicia	0	0	0
11. Sarfo Portia	0	0	0
12. Afranewaa Janet	1	2	3
13. Sulemana Opoku	0	0	0
14. Amponsah Samuel	0	1	1
15. Adusei Janet	0	0	0
16. Afrakoma Ruth	3	0	3
17. Antwi Lucy	0	0	0
18. Obeng Rosemary	0	1	1
19. Boakye Ernest	0	0	0
20. Biaa Joyce	0	0	0
21. Adama Joyce	0	1	1
22. Nyarko Akua	0	1	1
23. Bugatuga Akwasi	1	0	1
24. Darko Abigail	0	0	0
25. Nkrumah Eric	0	0	0
26. Fofie Martha	0	0	0
27. Owusu Eric	0	0	0
28. Gyewoahome Kwame	1	0	1
29. Kwabena Nyame	0	0	0
30. Kyerewaah Comfort	0	1	1
31. Frema Abena	1	0	1
32. Afua Darkowaa	1	0	1
33. Kwabena Solomon	1	0	1
34. Ameyaw Kwame	0	0	0
35. Opoku Linda	2	1	3
36. Boakye Esther	0	0	0
37. Ofori Winifred	2	1	3
38. Agyeman George	0	2	2
39. Ofori Daniel	0	0	0
40. Dwumo Akwasi	0	0	0
41. Adomako Rosa	0	0	0

42. Dufie Alice	1	0	1
43. Duodo Lydia	0	0	0
44. Konadu Esther	1	0	1
45. Asiamah George	0	0	0
46. Osei Boateng Isaac	0	0	0
47. Kwame Peter	0	0	0
Total	27	18	45
Average/Mean score	0.57	0.38	0.48

Appendix. 11: Pupils Reading Comprehension Test Results

11 (d) Wa Para-Military Primary Results

Code Name	Eng.	Twí	Total
1. Akyaa Helina	1	3	4
2. Boateng Cecilia	1	1	2
3. Antwiwaa Georgina	1	1	2
4. Addai Owusu Prince	0	1	1
5. Deborah Mensah	0	0	0
6. Appiah Kubi	1	0	1
7. Boakye Kwabena	1	0	1
8. Bemma Mabel	1	0	1
9. Konadu Rita N ^o 2	1	1	2
10. Oppong Michael	2	1	3
11. Nyarko Faustina	2	0	2
12. Owusu Philip	1	0	1
13. Owusu Leticia	0	0	0
14. Asim Kofi	1	0	1
15. Opoku Isaac	2	1	3
16. Serwah Afua	0	0	0
17. Barfi Kwabena	0	0	0
18. Iddrisu Akwasi	1	1	2
19. Agyeman Collins	0	1	1
20. Adu Rita	3	0	3
21. Anokye Nicholas	2	0	2
22. Achiaa Emelia	0	0	0
23. Kankam Benjamin	0	4	4
24. Opoku Josephine	0	0	0
25. Arkon Sampson	1	0	1
26. Amoah Christiana	0	2	2
27. Mensah Aidoo Enock	2	13	15
28. Barwua Janet	0	0	0
29. Atuahene Augustine	0	2	2
30. Nkum Esther	0	1	1
31. Antwi Akwasi	1	0	1
32. Konadu Rita N ^o 1	0	0	0
33. Addai Bismarck	0	0	0
34. Abrafi Margaret	1	0	1
35. Gyamfi Gabriel	1	0	1
36. Anane Grace	1	0	1
37. Amoako Yaw	1	0	1
Total	29	33	62
Average/mean score	0.78	0.89	0.84

ANSWER SHEET

Write down all your answers on this answer sheet
You are reminded not to write on the question booklet

Name Ellen Adusei

School State Experimental primary

1. water ✓

11. Clean ✓

2. not ✗

12. it ✓

3. ~~not~~ Your ✓

13. ill ✓

4. you ✓

14. Are ✓

5. way ✓

15. big ✗

6. Some ✗

16. that ✗

7. to ✓

17. as ✗

8. ~~Germ~~ the ✓

18. of ✓

9. we ✓

19. water ✓

10. The ✓

20. he ✓



ANSWER SHEET

Write down all your answers on this answer sheet
You are reminded not to write on the question booklet

Name God Fred Darkwa

School

- | | |
|-------------------------------|---------------------|
| 1. From this place | 11 The water we |
| 2 You should | 12 diseases from |
| 3 Would you take | 13 Look at this |
| 4 How do | 14 can make you ill |
| 5 clothes must be clean | 15 look you |
| 6 Why is this water not clean | 16 look you |
| 7 diseases from | 17 wash in |
| 8 The | 18 needles |
| 9 drink water | 19 we get diseases |
| 10 clothes must be | 20 from this place |

APPENDIX 11F :PUPILS' READING COMPREHENSION TEST RESULTS
SAMPLE OF PUPILS' WORK FOR TWI

MMUAYE KRATAA

Twere wo mmuaye nyinaa wo mmuaye krataa yi so.

Yerekrae wo se ntwere asom mmisa krataa no so.

Me din de Ruth Adusei

Me sukuu de .. PARKOSO.ROMAN..CATHOLIC.PRIMARY

- | | |
|---------|---------|
| 1..... | 11..... |
| 2..... | 12..... |
| 3..... | 13..... |
| 4..... | 14..... |
| 5..... | 15..... |
| 6..... | 16..... |
| 7..... | 17..... |
| 8..... | 18..... |
| 9..... | 19..... |
| 10..... | 20..... |

APPENDIX 11F :PUPILS' READING COMPREHENSION TEST RESULTS
SAMPLE OF PUPILS' WORK FOR TWI

MMUAYE KRATAA

Twere wo mmuaye nyinaa wo mmuaye krataa yi so.

Yerekræ wo sɛ ntwere asɛn mmisa krataa no so.

Me din de ENOCK ADJO MENSAM

Me sukuu de BAMPENASE KOFI ADJEI PRIMARY

1. wonom ✓

11. Saa ✓

2. SE ✓

12. NSuo ✓

3. wonon ✓

13. wei ✓

4. NSuo ✓

14. EWo ✓

5. Saa ✓

15. ma ✓

6. hop

16. yi ✓

7. NSuo ✓

17. mmaa ✓

8. Aba ✓

18. Ema ✓

9. etee ✓

19. dwonso ✓

10. Nea ✓

20. yadee ✓

APPENDIX 12

THE GAME: NEUTRALISING DISAGREEMENT BETWEEN SOCIAL GROUPS

Players: two opposing groups, with the audience constituting a third group. Their composition is as described below.

Group 'A': The Two Friends

Two friends shared between them the seven most widely spoken Ghanaian languages. The first understands Wali and Dagomba which the second does not, while the second understands Ewe and Ga which the first does not, but both understand Ghanaian English, Akan and Hausa.

Group 'B' The opposing side:

A husband and wife and their daughter, aged about 17 together with four friends who between them speak all seven languages.

Group 'C': The Audience

Different social groups who speak all the languages above.

Context: Travelling - disagreement between social groups in a bus.

How to Play the Game:

Participants should first be briefed on the role each is going to play. This can be done by supplying participants with cue cards that spells out what their role is. For example:

Group A: The Two friends:

The first

You are a teacher trainer returning from the north where you have just completed a workshop on English language teaching. You have taken your seat in a bus bound for the south behind a beautiful young girl who cares about nothing other than her looks

and is very particular about her hair style. She keeps shutting the window that supplies the main ventilation to passengers at the back where you are. You are almost suffocating, all your appeals to get her to open the window for a short while have failed, and your patience is exhausted. You force open the window and she is very angry and rude. You speak the following languages: Wali, Dagomba, Akan, Hausa, and English. The girl's father supports her and uses Ga to rally support from friends and members of other groups whose languages he speaks. A colleague you are travelling with who understands Ga, Ewe, Akan, Hausa, and English is your only supporter. Use all your languages to diffuse the tension and neutralise the attempts to rally support.

The second

You are a teacher trainer travelling with a colleague with whom you got a seat at the back of the bus. A beautiful young girl who cares about nothing other than her looks and is very particular about her hair style shuts the window that supplies the main ventilation to passengers at the back where you are. You are suffocating but all your appeals to get her to open the window for a short while have failed and your colleague loses his patience and forces the window open. The girl is angry and rude. You are the first to react and your reaction is to calmly say 'Oh beautiful young lady, so the school you attended taught you nothing but to value your hair style more than the lives of people'. This will spark off a lot of angry responses from her father and other passengers who will try to rally support by code switching into seven languages which you and your colleague together speak very well. The languages you understand are Ewe, Ga, Akan, Hausa, and English. Use all your languages to diffuse the tension and neutralise the father's attempts to rally support. Your partner does not understand Ewe and Ga but understands the rest. He also speaks Wali and Dagomba which you do not understand.

Group 'B': The Opposing Side

i) The father:

You are the father of a beautiful young girl who cares very much about her looks and is very particular about her hair style. You will support her against all passengers who want her to open the window and you will use three different languages (Wali, Dagomba and Ga) to rally support from friends and people whose languages you speak.

ii) The mother:

You are the mother of a beautiful girl who is being harassed by two men. Support your husband to defend your daughter, and ask for help from your friends and social groups whose languages you speak.

iii) The daughter:

You are the daughter of a middle age Wala man travelling with your parents and their friends. You are a beautiful girl who cares about your hair style. You enter the bus (classroom) and take your seat by a window through which passengers at the back get ventilation. You shut the window when the bus is in motion to ensure that your hair style is not spoiled by the rushing wind. No matter what other passengers say keep the window shut and be angry with anyone who uses force to open it.

Friends of the family

You are friends travelling in a bus when social disagreement is provoked. Your friend's daughter has started a quarrel with two strangers. Support your friend. However, stop the quarrel if a member of the other group speaks your language fluently.

Group 'C': The audience-Supporters of the Two friends

You are passengers travelling in a bus. A young girl keeps shutting the window that supplies the main ventilation to passengers at the back seat. It is forced open by a man who is suffocating. A disagreement is provoked. Support the two friends. If however, both groups have members speaking your language turn your attention to stopping the disagreement.

Group 'c': The audience-Supporters of husband, wife and daughter

You are passengers travelling in a bus when disagreement is provoked by a beautiful young girl who cares only about her looks and her hair style. Support the girl and her parents because they are your friends but shut up when a member of the other group speaks your language fluently.

The driver:

You are the driver of the bus. You will say nothing till the end when you will emphatically say 'The Ghana Private road Transport Union regulation clearly states that all windows should be opened fully when the vehicle is in motion' and add the following comment, 'Why all these languages? Are we all not Ghanaians? Are the two young men foreigners?' Even if they are, is that how foreigners should be treated? Shame!'

The game will demonstrate not only the value of a knowledge of a number of languages but also the power of the individual who has as his repertoire a number of languages in a multilingual context.

Appendix 13

Tools and Methods of Data Collection and Analysis

The basic tool that students need for data collection is a simple audio cassette recorder, preferably a pocket audio recorder to enable them carry and transport it without difficulty and most importantly to lessen the attractive attention it would have on pupils' and teachers' classroom behaviour.

When collecting data students could work as individuals, in pairs, or in groups and the data could be collected covertly or overtly. Where they foresee that the teacher whose lesson they intend to record might be sensitive to recording, the data could be collected covertly though the teacher's consent should be sought for using it after collection. With overt data collection they should take pains to explain to the teacher the purpose for which it is going to be used and get his or her consent first before the recording.

With respect to data analysis the following approaches may be helpful:

7.7.1 Interviewing

After transcribing and interpreting the data, students and participants may go back to the teachers whose work they recorded to match their interpretations with those of the original informants. However, as Adendorff (loc.cit) points out students must be made aware that because code switching behaviour is largely unconscious, original informants with a similar background to the students could be unreliable commentators (Adendorff 1996:404). This is because they are more likely to react in the same way.

7.7.2 Interpretations Using Substitution Frames

Teacher trainers could offer the students substitution frames for the interpretation of pre-recorded code switching data. That is the teacher trainer would provide students with discourses in which there are at least two opinions of interpretation in a switching slot

and from this exercise measure how adequately teacher trainees interpretations come close to that of the original interpretations (i.e. either by researchers or the original informants). However, they should bear the methodological problem mentioned above.

Teacher trainees either as individuals, in pairs, or groups could also be guided to prepare substitution frames to guide the original informants' interpretation of the code switching portions of the recorded data.

Teacher trainees could also be provided with pre defined coding schemes and asked to apply the scheme to pre-recorded language alternation data as individuals, or in pairs, or in groups. It is important in this exercise to check how closely the trainees' interpretations come close to that of the original researchers.

7.7.3 The Matched- Guise Interpretation

In this exercise teacher trainees are presented with two versions of the same tape recorded code switching data. Each version has a different base or matrix language. They listen to both and interpret the code switching versions working out for themselves reasons why switching may have taken place. Students attention could be drawn afterwards to what the trainer believes are the reasons for switching. In working out the communicative effect of code switching students could be provided a list of various judgements as to what the speakers were trying to achieve; their possible attitudes to the languages involved and to their audience.

Appendix 14 : Introductory Letters

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APPENDIX 14:A: TO WHOM IT MAY CONCERN

Telephone No. 2581

My Ref. No.

Your Ref. No.



St. Louis Training College

P. O. Box 3041

Kumasi Ashanti

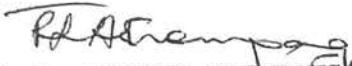
27th October, 1995

TO WHOM IT MAY CONCERN

This is to certify that the bearer of this note, Mr. Seidu Alhassan, is a member of staff of the St. Louis Training College, Kumasi. He is currently engaged in investigating the use of Ghanaian Languages as medium of instruction in Ghanaian primary schools.

We would appreciate any assistance that you may give to him to enable him carry out the research. In particular, we would be grateful if you could allow him access to relevant schools and classrooms.

We would also be grateful if primary school Headteachers and their teachers could co-operate with him in his observation of their lessons as well as complete the primary school teachers language medium use survey questionnaire.


R.J. ASANTE-FREMPONG (MRS.)
(PRINCIPAL)

GHANA EDUCATION SERVICE

In case of reply the number and
date of this letter should be quoted

METROPOLITAN EDUCATION OFFICE

P. O. BOX 1918
KUMASI—ASHANTI
GHANA, W/A

Our Ref No. GES/ASH/KM/PG.5/VOL.1



Your Ref No.

30th October, 1995

LETTER OF INTRODUCTION

This is to certify that Mr. Seidu Alhassan is a member of Staff of St. Louis Training College.


He is engaged in research on language use in our primary schools

We would appreciate any assistance Headteachers and their teachers give him in carrying out the research.

Please co-operate with him to use your classes, pupils and teachers.

Thanks for your co-operation.

HEADS ALL PRIMARY ✓
AND J.S.S. SCHOOLS
KUMASI METROPOLIS


F. ZOADI-SUADMA
DEPUTY METRO. DIRECTOR OF EDUCATION
for: METRO. DIRECTOR OF EDUCATION
KUMASI

GHANA EDUCATION SERVICE

In case of reply the number and
date of this letter should be quoted
Tel. No. 4344-6



REPUBLIC OF GHANA

REGIONAL EDUCATION OFFICE
P.O. Box 1906

KUMASI

My Ref. No. 3/21/Vol.III/59


Your Ref. No.

2nd November, 19 95

PERMISSION TO TOUR BASIC EDUCATION SCHOOLS IN ASHANTI REGION

Permission is hereby granted Mr. Seidu Alhassan, formerly
a tutor of St. Louis Training College and currently registered
as a post-graduate research student in the Department of Applied
Linguistics, University of Edinburgh, to tour Basic Education
Schools in the region, in connection with his research work.

I should be grateful if you will accord him all the necessary
help in this direction in your district.


(GLADYS KWAPONG) MRS.
DEPUTY REGIONAL DIRECTOR
For: REGIONAL DIRECTOR OF EDUC./ASH.

THE DISTRICT DIRECTORS
ASHANTI REGION

GHANA EDUCATION SERVICE

*In case of reply the
number and date of this
letter should be quoted.*



REPUBLIC OF GHANA

HEADQUARTERS
Ministry Branch Post Office
P.O. Box M.45
Accra

My Ref. No. EP.2765/157

Your Ref. No.

13th November, 1995

PERMISSION TO TOUR PRIMARY SCHOOLS IN GHANA

Permission is hereby granted Mr. Seidu Alhassan, a tutor of St. Louis Training College, Kumasi who is currently engaged in research into Language use in Ghanaian Primary Schools to use a selected number of schools in the country for his research purposes.

We are by this letter requesting Regional Directors, District Directors as well as Headteachers of Primary Schools which he may visit to co-operate with Mr. Alhassan in the exercise.

R. W. ASIEDU
DIRECTOR
(BASIC EDUCATION DIVISION)
for: DIRECTOR-GENERAL

dkk

APPENDIX 15: FREQUENCY OF TEACHERS' USE OF ENGLISH AND TWIN IN LESSONS

NUMBER OF WORDS IN ENGLISH AND TWI BY TEACHER, SCHOOL, SUBJECTS AND CLASS.

		ABORFO PRIMARY				ZONGO PRIMARY				MAKARANTA PRIMARY				WAPARA-MILITARY			
CLASS	Subj.	Teacher	ENG	TWI	Total	Teacher	ENG	TWI	Total	Teacher	ENG	TWI	Total	Teacher	ENG	TWI	Total
3	Eng.	TA	1314	-	1314	TD	2857	-	2857	TG	1133	88	1221	TJ	1521	30	1551
3	Maths	TA	2602	7	2609	TD	2211	3	2214	TG	1225	1971	3196	TJ	1425	586	2011
3	Science	TA	2821	352	3173	TD	1186	1826	3012	TG	39	3031	3070	TJ	445	1813	2258
3	GL	TA	30	1864	1894	TD	54	2021	2075	TG	13	2531	2544	TJ	68	1340	1408
		TEACHER: TB				TEACHER: TE				TEACHER: TH				TEACHER: TK			
CLASS	Subj.	TB	ENG	TWI	Total	Teacher	ENG	TWI	Total	TH	ENG	TWI	Total	TK	ENG	TWI	Total
4	Eng.	TB	1293	12	1305	TE	1296	14	1310	TH	1868	119	1987	TK	1138	192	1330
4	Maths	TB	-	-	-	TE	1756	2	1758	TH	1345	207	1552	TK	1974	19	1993
4	Science	TB	-	-	-	TE	1816	141	1957	TH	274	3651	3925	TK	1552	1044	2596
4	GL	TB	47	1935	1982	TE	220	2060	2280	TH	17	2173	2190	TK	54	2086	2140
		TEACHER: TC				TEACHER: TF				TEACHER: TI				TEACHER: TL			
CLASS	Subj.	TC	ENG	TWI	Total	Teacher	ENG	TWI	Total	TI	ENG	TWI	Total	TL	ENG	TWI	Total
5	Eng.	TC	1513	-	1513	TF	954	2	956	TI	2021	580	2601	TL	2045	-	2045
5	Maths	TC	2764	2	2866	TF	1107	27	1134	TI	1401	384	1783	TL	2324	-	2324
5	Science	TC	1683	17	1700	TF	361	227	588	TI	1218	1412	2630	TL	3534	2	3536
5	GL	TC	12	2067	2079	TF	26	1146	1172	TI	6	2200	2206	TL	-	-	-

APPENDIX 16: TRANSCRIPTS FOR PILOT STUDY

SUBJECT : GHANAIAN LANGUAGE
SCHOOL : ST ANNES' CATHOLIC PRIMARY
CLASS : P3
TEACHER : "PILOT" 1
TOPIC : EDIN PA ENI EDIN HUNU
DATE : 4TH DECEMBER, 1995

- 1 Tr. : er ye be ye **Ghanaian language**, ye nea ye kasa. Nti me npe se obia beye dede. Moate ana?
- 2 Chd : **Yes Sir**
- 3 Tr. : er ya ye biribi a yefre no **nouns**, ya ye edin. edin no, ye wɔ mu mmeinu. Yewɔ din pa ena edin hunu. Se wahunu? Ye kaedin hunu a, edin hunu no ye **common, common noun**. enna yeka se edin pa, edin pa no ye **proper noun. Okay**, seisei a yi obia kase wɔbɔ ne fie din a yebe hunu dee eye edin pa enna yebe hunu dee eye edin hunu. **Okay** yefre wo sen?
- 4 Chd. : Ntim
- 5 Tr. : Wo fie yefre wo sen?
- 6 Chd. : Kwame
- 7 Tr. : Kwame hwan?
- 8 Chd. : Kwame Peter
- 9 Tr. : Kwame Peter. **Okay**, wɔse fie yefre no Kwame Peter. Kwame Peter no ye den? edin hunu
- 10 Chn : Hunu
- 11 Tr. : Peter no nso ye edin hunu.
- 12 Chn : Hunu
- 13 Tr. : Se wahunu. **But** wo din pa yede fre wo, wo maame, wo papa de to wo din pa no ede sen?
- 14 Chd. : Ntim
- 15 Tr. : Ntim. Se wahunu. Ntim Kwame no, obia betumi ade Kwame se wahunu ewɔ edan mu ha. Hwan na ede Kwame wɔ ha? Aha, nti me kase Kwame bra, wo ehu se wo na ewɔ se woba. enna woso wo hunu se wo na esese woba. Yeka se Akwasi a yebe nya Akwasifoɔ bebiiree wɔha. Se wahunu enna yekase Yaa ana Ama a yebe nya ebinom bebiiree a wɔm be sori aba. enno ye den? edin hunu. Se wahunu. enna yewɔ edin pa. edin pa no ene den? Ntim. Nti Ntim Kwame wɔm na eye den? **Proper noun**. edin pa nono. Se wahunu. **Okay** se sa na etee dee a ye be pe edin pa ene edin hunu na ya **group** wɔm. ebia wɔ dee ewɔ. Nti ye be twere edin hunu. ena edin pa. **Okay** meto anansesem bi akyere mo. Meto anansesem wie a, mo be kyere me edin pa ewo mu ene edin hunu a ewo mu.

‘er Maame bi oo na yefre no Yaa Nkrɔwhema enna wɔ ye se wɔ kɔ afuom. Wɔde ne ba Akwasi Gyamera ena ekɔ ye Wɔm duru kwan ne mu no, na dua kakraka bi abu atɔ kwan nu mu. Nti wɔm ye se ne maame nbɔntra. ɔmaame no tumi foro dua no bɔtra kɔ akyire ena wɔ bisa neba no si: wontumi enforo. Neba no yi ano se wɔ nu dee wɔntumi enforo dua no. enna ne maame no kakyere no see wɔnfɔ asee. Neba no ɛfa asee no na wɔdane bayere. enne bayere a yefre no afasee

Okay, anansesem a meto ye yi ye bepe edin pa a ewomu ena edin hunu a ewomu. Nti wo nim a na wa pegya wo nsam. Me npe se obia be ye dede.

Okay, yeye edin hunu a na ewɔ saa anansesem yi mu. edin hunu. **Yes**

- 16 Chd. : Akwasi Gyamera
- 17 Tr. : Akwasi Gyamera eye edin hunu?
- 18 Chd. : eye edin pa
- 19 Tr. : eye edin pa. Nti ye de be hye ha. Akwasi Gyamera **
[writes Akwasi Gyamera on the bb]
- 20 Chd. : Dua
- 21 Tr. : Dua, dua eye edin ben? edin hunu. Dua ben? edua bia wɔ din, dua bia ye dua. Nti dua ye den? eye edin hunu. Aha.
- 22 Chd. : Afasee
- 23 Tr. : Afasee, afasee, afasee bia ewɔ din. Se wahunu. Nti se wo kase afasee a, na ekyere se wo enhunu afasee korɔ a wope se wobɔ edin. eye edin hunu. **Yes**
- 24 Chd. : Yaa Nkrɔwhema
- 25 Tr. : Yaa Nkrɔwhema enye edin hunu eye den?
- 26 Chd. : edin pa
- 27 Tr. : edin pa Yaa Nkrɔwhema Yaa Nkrɔwhema **Yes**
- 28 Chd. : Asee,
- 29 Tr. : Asee, asee, asee eye edin?
- 30 Chd. : Asee, enye edin
- 41 Tr. : Asee, enye edin. **Yes**. Anansesem a meto ye no ena mepe se mo hunu. edin hunu ene edin pa. **Yes**.
- 42 Chd. : Maame no
- 43 Tr. : Maame, maame, maame eye den?
- 44 Chd. : edin hunu
- 45 Tr. : edin hunu Maame ben? Maame ben?
- 46 Chd. : Maame Akosua Kyaa
- 47 Tr. : Maame Akosua Kyaa ana se maame. Aha enti gye se wobɔ edin se Maame noa, maame ye edin hunu. **Okay** se ya hunu wei a endee obi nso enfɔ edin hunu emma yen ye. edin hunu. **Yes**
- 48 Chd. : Yaw
- 49 Tr. : Yaw eye edin hunu
- 50 Chd. : Akwasi
- 51 Tr. : Points
- 52 Chd. : Yaa

- 53 Tr. : en ye ennipa din nkoa na ewe se ye bɔ. ewɔse ye dandane
no
- 54 Chd. : Gyamfua
- 55 Tr. : Gyamfua eye edin pa. **Yes** Yɛpɛ edin hunu
- 56 Chd. : Dua
- 57 Tr. : Dua ewɔ ha **Yes**
- 58 Chd. : Akosua Kyaa
- 59 Tr. : Akosua Kyaa eye edin pa. **Yes**
- 60 Chd. : Ama
- 61 Tr. : Ama eye edin hunu. Mate. Mese ma mo nka ennipa nkoa
edin. enneɛma bebiree na atwa ye hu ahyia wɔ sukuu ha sei. **Yes.**
- 62 Chd. : Bayerɛ
- 64 Tr. : Bayerɛ, bayerɛ eye edin hunu. Bayerɛ bɛn? Ye wɔ
ananatɔ. Ye wɔ ɛr**
- 65 Chd. : **Sir** kooko ase bayerɛ
- 66 Tr. : Ye wɔ pona. Ye wɔ kooko ase bayerɛ ene deɛ
ɛkekakekaho. Nti wo kase bayerɛ a eye edin hunu.
- 67 Chd. : Kookoo
- 68 Tr. : Kookoo. Kookoo [Writes word on bb]
- 42 Chd. : Bankye. **Sir.** Yaw Barimah
- 43 Tr. : Me nɛ se obia ara be kasa. eye a na wo aɛgya wo nsam.
Na me nɛre woa wo a enkasa
- 69 Chd. : **Sir** kubie
- 70 Tr. : [Points]
- 71 Chd. : Mankani
- 72 Tr. : Hɛ! Mankani. eye. Mhum
- 73 Chd. : Bankye
- 74 Tr. : Bankye eye.
- 75 Chd. : **Sir** Brɔdeɛ
- 76 Tr. : [Points]
- 77 Chd. : Paye
- 78 Tr. : Paye eye
- 79 Chd. : Brɔdeɛ
- 80 Tr. : [Points]
- 81 Chd. : **Pineapple**
- 82 Tr. : Ye ka Twi. **Pineapple** ne Twi ne Twi ye fre no sen?
- 83 Chd. : Abrɔbe
- 84 Tr. : Abrɔbe **Yes**
- 85 Chd. : Abe
- 86 Tr. : Abe **Yes**
- 87 Chd. : Bankye
- 88 Tr. : Yabɔ edin dada
- 89 Chd. : Kwadu
- 90 Tr. : **Yes**
- 91 Chd. : Brɔdeɛ

- 92 Tr. : Yabɔ̃ edin dada eye. **Yes**
- 93 Chd. : **Rice**
- 94 Tr. : **Okay.** Yɛpɛ edin pa. edin pa bɛn na seisei no yɛsɛ yɛbɛ sua yi? Mhum
- 95 Chd. : Nnipadua din
- 96 Tr. : [Points]
- 97 Chd. : Ruth
- 99 Tr. : Ruth eye edin hunu
- 100 Chn. : Akosua Mako. Ama Akosua Kyaa
- 101 Tr. : Maka kyere wo se wo pegya wo nsam a na wo kasa. Me bɛ buo. **Yes Mary**
- 102 Chd. : Ama
- 103 Tr. : Ama yɛ edin hunu. Yɛpɛ edin pa. Gyamfua yɛ din pa. eye edin pa na me mpɛ sɛ wo bɛbɔ̃ nipa din nkoa. Yɛ wɔ̃ ɛnneɛma bɛbiree wɔ̃ ɛwiasɛ a, yɛbɔ̃ din ara eye edin pa
- 104 Chd. : Twum, Twum
- 105 Tr. : [Points]
- 106 Chd. : Agyei!
- 107 Tr. : [Points]
- 108 Chd. : Mankani
- 109 Tr. : Wopɛ aduane papaapa. Mankani, mankani, mankani. **Yes**
- 110 Chd. : Akosua Mansa
- 111 Tr. : Akosua Mansa. Me se ɛnye nipa edin nkoa na yɛn bɔ̃ din **Yes**
- 112 Chd. : Gyata
- 113 Tr. : **Yes**
- 114 Chd. : Adwowaa
- 115 Tr. : Adwowaa? eye edin hunu. Yɛ pɛ edin pa. **Okay** Kodie.
- 116 Chn. : Ee!
- 117 Tr. : Wo nim sɛ eye kuro? Kuro din eye edin bɛn? eye edin pa.
- 118 Chn. : **Sir** Besease
- 119 Tr. : Afei deɛ mo nyinaa adane akɔ̃ Besease. **Yes** Kuro foforɔ̃
- 120 Chd. : Edwinease.
- 121 Tr. : Edwinease. **Yes**
- 122 Chd. : Kumasi
- 123 Tr. : Kumasi
- 124 Chd. : ɛboɔ̃hu
- 125 Tr. : Boɔ̃hu
- 126 Chd. : Foase-Ampabame
- 127 Tr. : Aha
- 128 Chd. : Asewasi
- 129 Tr. : Asewasi
- 130 Chd. : Brɔ̃foyɛdu
- 131 Tr. : Brɔ̃foyɛdu
- 132 Chn. : Gayana [Noise]
- 133 Tr. : Ghana eye Gayana

- 134 Chd : Ghana
- 135 Tr. : **Keep quiet.** Ghana eye edin pa. Wahunu se saa edin no nyinaa ye twere ara yede adekese na ehye asee? Adeɛ bia eye edin pa bia no yede ededen na ehye asee? entwere ye no eye **capital letter** Se wahunu? eno na wɔde hye asee. Ghana ene Nigeria. Ya nya Kɔdie. **Yes**
- 136 Chd : Accra
- 137 Tr. : eye. **Okay** seisei yahunu se enipa edin eye din pa. Kuro edin eye din pa. ɔman edin eye din pa. Se wahunu? enipa edin, kuro edin ena ɔman edin eye edin pa. ena enipa ena kuro edin eye din pa. Me sane aka sem bi. Me ka asem bi mo ntieɛ: Agya Kwɔpa wɔkɔ apam ena wɔkɔ hunu mampam ena wɔ gyae apam. Agya Kwɔpa ekɔ apam ena wɔkɔ hunu mampam ena wɔ gyae apam. Dee ewɔ he ena eye edin pa? wɔkɔ hunu mampam ena wɔ gyae apam eye edin pa? edin pa **Yes** Kwame. Aha din hunu. Din hunu, din hunu. Aha!
- 138 Chd : ɔgyae
- 139 Tr. : ɔgyae enye din oo! edin hunu
- 140 Chd : ɔgyae mampam
- 141 Tr. : Mampam
- 142 Chd : Apam
- 143 Tr. : Aha, aha apam. Apam nsoso ye edin hunu
- 144 Chd : Wɔkɔ pam mampam
- 145 Tr. : Wɔkɔ pam mampam ena mampam eforo epam, epam no ara wɔ foro ye no ye eden?
- 146 Chd : eye dua
- 147 Tr. : Dua. Me boa?
- 148 Chd : **Yes Sir**
- 149 Tr. : But wa kyere mu ama wa hunu se dua wei ena wɔ foro ye. Nti enono be ye edin pa. ɔpam no ye dua, dua din. Nti enono be ba edin pa efiri se ya tumi abɔ din ena ya hunu se saa dua wei na wɔforo ye no. er hwan na ebe tumi ato anansesem ketewaa bi akyere yen, ama yahunu edin pa ene edin hunu ara ewom? **Yes**
- 150 Chd : Anansesem su so.
- 151 Chn : Ye sesa suao!
- 152 Tr. : Kano kese
- 153 Chd : Anansesem su so.
- 154 Chn : Ye sesa suao!
- 155 Chd : Fa no se, maame bi oo ena wcwɔ entaafɔ mmeinu. Dakoro bi ne mma no erekɔ sukuu no, ena wɔ ka kyere wɔm se, wɔm befiri sukuu aba no na wabɔ bankye ampesie asi wɔm hɔ. ena ne mma no si yoo. Wɔm kɔ baɛ no na wɔm maame no awuo ma ya sie aye ayie. Wɔm baɛ no ena wɔm bisa wɔm nana se 'maame wɔ he?' ena nana no se wɔm se wɔm maame awuo.
- 156 Tr. : Mo ma yentie no yiye oo
- 157 Chd : ena nkɔda no fa adwe, wɔbɔ a, na awura amena mu, wɔbɔ a na awura amena mu. Afei wɔm se se wɔm bɔ bio na ewura

amena nu mu bio ara wɔm so be wura mu bi. Wɔbɔ ye no ena ewura amena no mu. ena wɔm so dii akyire. Wɔkɔ ye ara na wa kɔto abiriwa bi ara ya to no pono mu. ena abiriwa no se me nana bue me, bue me. ena wɔ bue no. ena abiriwa no kakyere wɔm se me nana nom mo nkɔ edan wei mu. Mo bekɔ na nkyensi si hɔ, deɛ ebe kase fame, fame no, enfa no. Na deɛ ebekase enfa nono, eno na fa no bra. Mobara mo nkɔ eda mu ha bayere wɔ hɔ. Na deɛ ebe kase fame, fame no enfa no. Na deɛ ebekase enfa nono, ena fa no bra. Wɔkɔ baee no ena wɔ be sensen ye ena wɔde si gya soɔ. ena wɔ to wɔm dwom se : egya wɔ hɔ ara anka ma didi dadaada. Se enka enna wɔ hɔ ara anka ma didi dadaada. Anka adeɛ akye dadaada yi biribia anka mano o. Akwaa gyeo

- 158 Tr. : Mo ate aseɛ?
- 159 Chd : **Yes sir**
- 160 Tr. : Mmo mmɔ mo nsam. Mon clap pu mmano
- 161 Chn : [Clapping]
- 162 Tr. : Anansese ara wɔto ye yi, sesei ye hwehwe edin ara ewo mu ara edɔso paa.ebi ye edin pa ena ebi eye edin hunu. Okay er ennasɔ eye den? ennasɔ eye edin hunu. Ye sei obi ara na se yeto ne nnasɔ eno na yefre no se ennasɔ. Se mo ahunu deɛ me kyere no? Wahunu se se mo kɔ aseie ara yato ennasɔ ewɔ hɔ. Se wahunu?
- 163 Chd : **Yes Sir**
- 164 Tr. : Wo wɔhɔ ara wobe hunu se saa enna no na yefre no se ennasɔ. **Okay** adwe, adwe no eye den? edin hunu efiri se wo enim adwe koro ara ye ka ho asem.
- 165 Chd : Adwe bia ye adwe
- 166 Tr. : **Okay**. Nana, nana ye den?
- 167 Chd : edin hunu
- 168 Tr. : Nana ye edin hunu
- 169 Chd : Nana bia ye nana
- 170 Tr. : Nana bia ye nana. Nti wope se ye hunu se nana asimasi deɛ ara esese wo kase Nana**
- 171 Chd : Nana Ama Nyako
- 172 Tr. : Nana Kɔkɔ no ara yefre no sen
- 173 Chd : Nana Wireko.
- 174 Tr. : Nana Wireko. Se wa hunu? Nana Wireko. eye edin pa. Se wo ate aseɛ?
- 175 Chd : **Yes sir**
- 176 Tr. : **Okay**. ena wɔbɔ adwe. Adwe ye den?
- 177 Chd : Din hunu
- 178 Tr. : Ntaafɔɔ, ntaa
- 179 Chd : Din hunu
- 180 Tr. : eye edin hunu [writes 'Ntaafɔɔ' on bb] Sika.
- 181 Chd : eye edin hunu
- 182 Tr. : Bankye
- 183 Chd : Din hunu

- 184 Tr. : Maame. Eno na ya twere no wɔ ha. Kyensin
 185 Chd : Din hunu
 186 Tr. : Dɔkunu
 187 Chd : Din hunu
 188 Tr. : Nkyenam
 189 Chd : Din hunu
 190 Tr. : Nsuo
 191 Chd : Din hunu
 192 Tr. : Nsuo ben
 193 Chd : Nsuo bia
 194 Tr. : Se wɔbɔ nsuo no din ara na abe ye eden?
 195 Chd : Din pa
 196 Tr. : Din pa. Nti river, river Volta
 197 Chd : eye edin pa
 198 Tr. : eye edin pa. Ya bɔ ne din. ena mo nsuo no ara eda ha no
 yefre no sen?
 199 Chd : Nsuo Abena
 200 Tr. : Nsuo Abena
 201 Chd : ena ebibenom
 202 Tr. : eden?
 203 Chd : ebibenom
 204 Tr. : ebibenom?
 205 Chd : Mm. Me didi ara deɛ mede be nom
 206 Tr. : Yefre no Asou ebibenom?
 207 Chd : ebibenom
 208 Tr. : eno ye din pa. **Okay** eno deɛ mo ma yen hwe na enneema
 ya twere agu ha yi, ye bubɔ din maako, maako na ye ahunu edin pa ene
 edin hunu

PILOT: 2

SCHOOL : ST ANNE'S CATHOLIC PRIMARY
CLASS : P3
TEACHER : "PILOT 2"
SUBJECT : ENGLISH
TOPIC : GRAMMAR
DATE : 7TH. DECEMBER, 1995

- 1 Tr. : We have English grammar this morning. I want *. before we continue I want someone to tell me the topic we treated last week on English.
- 2 Chd. : Simple present
- 3 Tr. : We did the Simple present and the next week, the following week we did what?
- 4 Chd. : Past continuous tense
- 6 Tr. : Past continuous tenses. All of you
- 7 Chn. : Past continuous tenses.
- 8 Tr. : Right. When we said Kofi is reading. I Want someone to change this sentence to the past continuous tense. Aminu
- 9 Chd. : Kofi was reading
- 10 Tr. : Very good. Kofi was reading. So this is the past continuous tense of this sentence. Right this is not our topic this week. We have finished with that. The topic this week is. Who will read it for us? Ameku.
- 11 Chd : Future tenses
- 12 Tr. : Future tenses. All of you
- 13 Chn. : Future tenses
- 14 Tr. : Again
- 15 Chd. : Future tenses
- 16 Tr. : What did you eat yesterday? Felix. What did you eat yesterday?
- 17 Chd : I ate, banku and okra soup.
- 18 Tr. : Very good. She said she ate banku and okra soup. What are you going to eat this afternoon? . What are you going to eat this afternoon?
- 19 Chd. : ampesie
- 20 Tr. : Yes Sani
- 21 Chd. : Rice and stew
- 22 Tr. : Put it in a sentence
- 23 Chn. : I am going to eat rice and stew
- 24 Tr. : All of you
- 25 Chd. : I am going to eat rice and stew
- 26 Tr. : Very good. I ate fufu yesterday. Yesterday is past and gone ha? I am going to eat rice and stew this afternoon. Ha? I am going to eat rice and stew this afternoon. We said, 'I am going to' because you have not eaten the rice yet. Have you eaten it?

- 27 Chn : No Miss
- 28 Tr. : You are now going to eat it. So you said, 'I am going to eat rice and stew this afternoon'. Which means it is in the future. Hum? Future can be this afternoon. It can be tomorrow, it can be a year. It can be a month or in a month's time mm? You have planned to do but you have not done it. So you say it will be in what? Future tense
- 29 Chn. : [Noise]
- 30 Tr. : We learnt a song last Friday. Now I want someone to change this and tell me something we have planned to do after this. Yes Gifty.
- 31 Chd. : I am going to learn a song tomorrow
- 32 Tr. : Very good. Clap for her
- 33 Chn. : Clapping
- 34 Tr. : Read the sentence for me . All of you.
- 35 Chd. : I am going to learn a song tomorrow
- 36 Tr. : Very good. What is the future sense in this? What is the future tense in this? Asare.
- 37 Chd : 'Going to'.
- 38 Tr. : 'Going to'. Good. 'Going to'. Hum? 'Going to'. Right, so we have got to know that 'going to' can express something that we have not done. Now that we have got to know this word 'going to'. This is what we are going to use to form sentences. Ha? We are going to use 'going to' as the future tense. Now I want someone to give me a sentence using this word 'going to'. Yes L
- 39 Chd. : I am going to school. I am going to school.
- 40 Tr. : I am going to school? No. It is not future tense. You are still doing the thing. Hum? This one, you are going to use 'going to' to express futurity. What you are going to do but you have not done it. Do you understand? Mary
- 41 Chd. : I am going to school today
- 42 Tr. : I am going to school today. Mm, Mhum. Asare
- 43 Chd. : I am going to play football with my friends.
- 44 Tr. : When? When are you going to do that?
- 45 Chd. : I am going to play football with my friends tomorrow
- 46 Tr. : I am going to play football with my friends tomorrow. You see! He has not done the thing yet. He is planning to do something. He has not done it yet, so it is future. Do you understand? **eye ade ara wa ye wadwene se wobe ye. Wo nya yeye. Adea ara wa hwahwe se wobe ye.** Do you understand?
- 47 Chn : Yes Miss.
- 48 Tr. : I want another sentence this time a girl. Yes
- 49 Chn. : I want to go to class.
- 50 Tr. : I want to go to class? You want to. Use 'going to' to say whatever you want to do. **Mese fa 'going to', 'going to' no na faka asem no. Ana se fa ka dee wope se wobe ye no.** Do you now understand?
- 51 Chd. : Yes Miss.

- 52 Tr. : Yes
- 53 Chd. : I will go to the hospital tomorrow afternoon.
- 54 Tr. : okay. I will go to the hospital tomorrow afternoon. She has planned to go to hospital tomorrow. She has not gone yet. She will go tomorrow so it is future. **efa** 'will'. **Usi** 'going to'. What are the rest doing? Yes
- 55 Chd. : I am going to Tafo today.
- 56 Tr. : Very good. I am going to Tafo today. Today can be this morning, this afternoon or it can be this evening. Ha! So the going to is the future tense. **Afei dee mo te ase?** Do you know understand?
- 57 Chn. : Yes Miss
- 58 Tr. : I want the last example. Yes
- 59 Chd. : I will go to farm. I will go top farm tomorrow.
- 60 Tr. : Ma anka se nfa 'will' no. Use 'going to' Yes.
- 61 Chd. : I am going to Accra tomorrow
- 62 Tr. : You are going to Accra tomorrow. Good. Everyone is saying tomorrow, tomorrow because teacher said tomorrow. I want you to change it. The future can be 'next week', 'next month', 'next year or next Friday. He! Aha. So do not say tomorrow, tomorrow, tomorrow. Ofori say something
- 63 Chd. : Next year I will go abroad
- 64 Tr. : Louder
- 65 Chd. : Next year I will go abroad
- 66 Tr. : That is correct but I want to use 'going to'. Again
- 67 Chd. : Next year I am going abroad
- 68 Tr. : Good. Clap for him
- 69 Chn. : Clapping
- 70 Tr. : Yes Gifty
- 71 Chd. : I will go to market today
- 72 Tr. : Today I will go to market? 'going to **no w** he?
- 73 Chn. : Madam, madam
- 74 Tr. : Yes Buah
- 75 Chd. : The boy is going to bath
- 76 Tr. : The boy is going to bath. Mm. It does not sound like what I wanted. The last one, the last example. Ama.
- 77 Ama : In the next year I was going to market.
- 78 Tr. : You said I was going oh! 'Was' **no ara aba h** no kyere den? **Atwa mu.** The 'was' means it has what?
- 79 Chn. : Past
- 80 Tr. : But we are doing future. What will come. He! but it is not yet here. Hen! The last one and then we move on. The last one Aba.
- 81 Aba. : I Will be going to Accra next year.
- 82 Tr. : Very good. Clap for her
- 83 Chn. : Clapping
- 84 Tr. : She will be going to Accra next year. May be she is going on transfer I do not know. She is going to Accra next year. ***** [writes

- the sentence on the bb] I want someone to come to the board and underline the future tense in it. Vero
- 85 Chd. : [Goes to the bb and underlined 'is going to']
- 86 Tr. : Now the last sentence from you. I want some one to read what I have written on the board. I want some one to read. Well, read the first sentence.
- 87 Chn. : We went to church last Sunday
- 88 Tr. : All of you
- 89 Chn. : We went to church last Sunday
- 90 Tr. : What does it mean? What does the sentence mean? Yes
- 91 Chd. : It means they went to church last Sunday
- 92 Tr. : It means they went to church last Sunday. It has past ha!
- Now I want you to put in some word so that it will mean something in the future. Read and put in something. Mercy.
- 93 Chd. : We are going to church next Tuesday
- 94 Tr. : Again
- 95 Chd. : We are going to school next Tuesday
- 96 Tr. : Very good. So what are you going to put here? All of you
- 97 Chn. : Going to
- 98 Tr. : Again
- 99 Chn. : Going to school next
- 100 Tr. : 'Going to' When you bring in 'going to', it is going to mean going to. Good. Now read the sentences on the board.
- 101 Chn. : Complete these sentences using 'going to'
- 102 Tr. : One
- 103 Chn. : The children are [---] to eat gari and beans this evening
- 104 Tr. : Number two
- 105 Chn. : The girls are [---] play net ball next Friday
- 106 Tr. : Three
- 107 Chn. : Next year I am [---] make a big farm
- 108 Tr. : Four
- 109 Chn. : The woman are [---]
- 110 Tr. : What is that word?
- 111 Chn. : The women
- 112 Tr. : Again
- 113 Chn. : The women
- 114 Tr. : The. read the sentence
- 115 Chd. : The women are [---] weed the farm tomorrow
- 116 Tr. : [Signals: uses a pointer]
- 117 Chn. : My father is [---] buy a car next month
- 118 Tr. : Who will complete the first one for us? Amo.
- 119 Amo. : The children are going to eat
- 120 Tr. : Louder
- 121 Amo. : All the children are going to eat gari and beans this evening.
- 122 Tr. : Good. Start work.

SUBJECT : MATHEMATICS

SCHOOL : KODIE LOCAL AUTHORITY PRIMARY
CLASS : P3
TEACHER : "PILOT 3"
TOPIC : FRACTIONS
DATE : 11TH. DECEMBER, 1995

- 1 Tr. : Who can remind us of what we treated last week? What was our topic on mathematics last week? Yes
- 2 Chd. : Long division
- 3 Tr. : Yes we did long division. Good. Is that the only thing we did? Yes.
- 4 Chd. : Division
- 6 Tr. : Division, division was our topic. We treated division. What did we say was the meaning of division? What was the meaning we gave? Yes.
- 7 Chd. : Sharing
- 8 Tr. : Sharing. Thank you. Right our topic this week is. Who will read it? Who can read it for us? S
- 9 Chd. : Fractions
- 10 Tr. : Fractions. All of you.
- 11 Chn. : Fractions
- 12 Tr. : Again
- 13 Chn. : Fractions
- 14 Tr. : Good. Who can tell me the meaning of fraction? What does fraction mean? *Asee ne sen? Fraction ene den?* Yes
- 15 Chd. : It is part of a whole
- 16 Tr. : Fraction is part of a whole.*** [writes it on the bb] Let's read it
- 17 Chd. : Fraction is part of a whole
- 18 Tr. : Very good. It is part of a whole. Right. So If I have this, this. Can you say it is a fraction?
- 19 Chn. : No Miss
- 20 Tr. : Why is it not a fraction? Why? Yes
- 21 Chd. : It is one
- 22 Tr. : It is one. So what do we call it? If it is one what name can you give to it
- 23 Chn. : Half
- 24 Tr. : Half?
- 25 Chn. : A whole
- 26 Tr. : A whole. We call this a whole. Why is it a whole? Why is it a whole? Yes.
- 27 Chd. : inaudible
- 28 Tr. : No. Sit down Edith
- 29 Chd. : Because it is only one

- 30 Tr. : Yes
- 31 Chd. : inaudible
- 32 Tr. : Eh so you won't speak louder?
- 33 Chd. : Because we have not divided the whole thing
- 34 Tr. : She said, 'Because we have not divided the whole thing'. Mum? so it is a whole. What about if I have this. This you said is a whole. If I try to divide this whole into two like this. What name are you going to give to this part? ** Sam.
- 35 Sam : Half
- 36 Tr. : Half. You say it is half. How do we write half? I want some one to come to the board and write half. Yes?
- 37 Chd. : [Writes 'Half']
- 38 Tr. : Thank you that is in words. I want it in figures. Half in figures.
- 39 Chd. : [Writes 'Half']
- 40 Tr. : No, write in figures. Half in figures. Yes
- 41 Chd. : [Writes 'Half']
- 42 Tr. : It is the same as this boy wrote. Half in figures. Okay let me help you
- 43 Chn. : Madam **me, me, tikya ma me twere**
- 44 Tr. : Sit down, sit down. I want to write it here. Now listen. It is a whole that has been divided into what? Two ($1/2$ or $1/2$). It is one and it has been divided into how many parts?
- 45 Chn. : Two
- 46 Tr. : So you write it like this or one over two. Half. Is that okay?
- 47 Chd. : Yes Madam
- 48 Tr. : Yes I write half like this and I divide it into two. Again. How many parts do you have? How many parts? Gregory?
- 49 Greg. : One over four parts
- 50 Tr. : One over four parts. One whole number and I have divided it into how many parts?
- 31 Chn. : Four
- 32 Tr. : So you call it. Who can give me the name? Apau
- 33 Apau : Quarter
- 34 Tr. : Quarter or quarter or? Yes
- 35 Chd. : One fourth
- 36 Tr. : One fourth. All of you
- 37 Chd. : One fourth
- 38 Tr. : Yes You name it one over four and if you divide one by four and you want to name it, you have to write or name it like this: Either one over four like this or this or what other name? Or quarter as she said. Now I want someone to come to this board and name this part. Yes who will come and name it? Yes Judy.
- 39 Chd. : [writes $1/3$]

40 Tr. : Yes you have done well. Why did you name it one over three or $1/3$. Why did you write it like that? Judy why did you name it one over three? Anna help her

41 Anna. : Because the whole thing is one, because the whole thing is one and you divided it into three.

42 Tr. : Very good. She said the whole thing is one, you have one whole, then I divided it into how many parts?

43 Chn. : Three

44 Tr. : So if you want to name it, it should be one over

45 Chn. : Three

46 Tr. : Or one third. Ha! Thank you. now take your home work books and name this parts for me. *****

47 Tr. : if you finish just raise up your hand and I will come and check. Name the parts

48 Tr. : Okay hand down I hope you have finished by now. I want someone to come to the board and name it.

49 Chd. : [Goes to the board]

50 Tr. : You tell us how you managed to get your answer. What is the name tell us.

51 Chd. : One-sixth

52 Tr. : All of you

53 Chd. : One-sixth

54 Tr. : Wait why is it one-sixth?

55 Chd. : It is one whole and I divide it into six parts.

56 Tr. : Thank you very much. He says it is one whole and we divided it into six parts. It is one-sixth. Is that clear?

57 Chd. : Yes Miss

58 Tr. : Thank you very much. Who will come and do this? Yes This time I want a boy. Only the girls are doing the work. He how do you call it?

59 Chd. : One -eighth

60 Tr. : Louder

61 Chd. : Louder

62 Tr. : All of you how do you call it?

63 Chn. : Inaudible

64 Tr. : Louder

65 Chd. : Inaudible

66 Tr. : Why is it one-eighth?

67 Chd. : Inaudible

68 Tr. : Thank you very much. Take your mathematics books and work these. Ha! Now listen you are going to name the parts on the bb. Ha! Do these exercises. When you are dividing make sure that the parts are equal. Ha? One should not be bigger than the other. Is that okay?

69 Chd. : Yes Miss

70 Tr. : Make sure you divide it into equal parts. Don't use pen. Use pencil to draw and when you finish and you are going to write down the answer then you write, use pen. Do you understand?

71 Chd. : Yes Miss
72 Tr. : Start work

Comment: Tr. stopped recording immediately she gave order for start work.

SUBJECT : ELEMENTARY SCIENCE

SCHOOL : ST CYPRIAN PRIMARY
 CLASS : P3
 TEACHER : "PILOT 4"
 TOPIC : WHERE ANIMALS LIVE
 DATE : 12th DECEMBER, 1995

- 1 Tr. : Who can remind us the topic we treated last week on science? Yes
- 2 Chd. : How animals move
- 3 Tr. : Louder
- 4 Chd. : How animals move
- 6 Tr. : How animals move. Do you all agree?
- 7 Chn. : Yes Miss
- 8 Tr. : Yes. How animals move. I want you to mention any animal that you know. Jane.
- 9 Chd. : Crocodile
- 10 Tr. : Crocodile. Nancy
- 11 Chn. : Parrot, parrot
- 12 Tr. : Parrot. Yes. You
- 13 Chd. : Sheep.
- 14 Tr. : Sheep Yes
- 15 Chd. : Snake
- 16 Tr. : Snake Yes
- 17 Chd. : Goat
- 18 Tr. : Yes
- 19 Chd. : Snail
- 20 Tr. : Snail. Very good. We have goat, sheep, fish, parrot, snake. Okay. We have plenty of them. Mum, now all these animals, they move to go and find something to eat. Right. How does these animals move? How does they move?
- 21 Chd. : Walking
- 22 Tr. : Walking. Yes
- 23 Chd. : Creeping
- 24 Tr. : Yes
- 25 Chd. : Flying
- 26 Tr. : Flying. Okay I know you remember. You can remember everything. Right some fly, others crawl, others swim, others walk on four legs, others creep. You see I hope you remember everything.
- 27 Chn. : Yes Miss
- 28 Tr. : Right our topic this week is
- 29 Int : Noise from the neighbouring class due to teacher's absence. [Teacher leaves class. Tape recording is paused]
- 30 Tr. : Who will read it for me?
- 31 Chn. : Miss, miss
- 32 Tr. : Do not call my name. Do not call my name. John

- 33 Chd. : Living places of animals
 34 Tr. : Again
 35 Chd. : Living places for, of animals
 36 Tr. : All of you
 37 Chn : Living places of animals
 38 Tr. : Living places of animals. Right, right. So all these animals that we mentioned have got places that they live and we want to know where they live. Han! When you look at your book. Those who have got this. The green cover open at page 12 and those with the red cover page 15. Thank you. Ye! Let's take the tamed animals for example. Parrot, parrot is a bird you know
 39 Chd. : Yes Miss
 40 Tr. : Where does this animal live? Where does it live? Sam. Where does this animal live?
 41 Sam : In the forest
 42 Tr. : In the forest? You have done well. Yes
 43 Chd. : On a high tree
 44 Tr. : On a high tree. Give him a big clap.
 45 Chn : Clapping
 46 Tr. : So you see this animal lives on tress. What about this? Where does it live? Jack
 47 Chd. : inaudible
 48 Tr. : It lives in water? Speak louder he! It lives in water. So we have got to know that some animals live on land while others live where?
 49 Chn : In water
 50 Tr. : In water. Mum? Some live on land and others in water. All those in the forest are those living on land and those in water you know them. **Wo nim?**
 51 Chn : Yes madam
 52 Tr. : So I want you to give me names of animals who live on land. First, all of you we want those who live on land. Who can give us an example? Fred
 53 Chd. : Lion
 54 Tr. : Lions live on land. Winny
 55 Chd. : Monkey
 56 Tr. : Monkey. Yes Yvonne
 57 Chd. : Elephant
 58 Tr. : Elephant, elephant. Thank you. I know if I ask you to mention all, I know you can mention any animal on earth. Thank you. What about those who live in water? Yes
 59 Chd. : Frog
 60 Tr. : Frogs live in water
 61 Chn : Fish
 62 Tr. : Fish. It lives in water. Is that all?
 63 Chd. : Crocodile
 64 Tr. : Crocodile lives in water Thank you. Very good. It's okay. Put your hands down I know you can say them. When we say they live in

- water and in land it does not mean all these animals that we mentioned live on land. Some live on high trees, others live in a hole. Who can tell me where hen live? A hen. The home of a hen.
- 65 Chd. : In a cage
- 66 Tr. : In a cage? No. Thank you, you have done well but not in a cage. We have a name for that. Yes Abiriwa.
- 67 Chd. : Hen live in a hen coop
- 68 Tr. : It lives in a hen coop. The hen, the chicken and the cock. They live in a hen coop. Right. Where does a sheep, where does a sheep live? Sheep. Yes
- 69 Chd. : Pen
- 70 Tr. : Pen. Very good. You did not say it louder.
- 71 Chd. : Land
- 72 Tr. : Land. Yes. We know they live on land but what particular hum? Yes is where?
- 73 Chd. : Pen
- 74 Tr. : Yes. Good. Yes all of you
- 75 Chd. : Pen
- 76 Tr. : And where does this animal live? Snake Sam.
- 77 Sam. : In the forest
- 78 Tr. : In the forest or in the bush. You see they do not normally come home hum? What about this animal? Lion. Mike
- 79 Mike : [silent]
- 80 Tr. : This means you were not paying attention. You were not paying attention. Yes
- 81 Chd. : Land
- 82 Tr. : Yes I know they live on land. Thank you. But I want the home of this animal. Yes.
- 83 Chd. : Forest
- 83 Tr. : Forest. I want the home of this animal. Yes.
- 84 Chd. : Bush
- 86 Tr. : Should I tell you the answer?
- 87 Chd. : No, no Miss
- 88 Tr. : Yes. It is Okay Judy will tell us.
- 89 Chd. : Lion's den
- 90 Tr. : Lions live in a den. **Hum! Mo nte endwom wei da.** er how do they sing it? Judy can you remind me?
- 91 Chn : No Madam
- 92 Tr. : You can not remember. Okay I will teach you that song later Mum? It lives in a den. In a what?
- 93 Chn : Den
- 94 Tr. : We have these animals: birds, birds, birds. Yes
- 95 Chd. : It lives in the sky
- 96 Tr. : In the sky? Thank you but that is not true. Yes
- 97 Chd. : They live on trees
- 98 Tr. : They live on trees but that is not their home. They have a special place they prepare as their home.

- 99 Chd. : Cage
- 100 Tr. : Cage or? Sometimes they live in a cage. We prepare the cage for them. At other times they live in. Yes
- 101 Chd. : In a nest
- 102 Tr. : In a nest. All of you.
- 103 Chd. : In a nest.
- 104 Tr. : Again
- 105 Chd. : In a nest.
- 106 Tr. : Right. So you see all these animals. All the animals on earth have got a place that they live. Who can mention an animal and then tell me where it lives? Yes.
- 107 Chd. : A mouse. A mouse lives a hole.
- 108 Tr. : Very good. Give him a clap
- 109 Chn : Clapping.
- 110 Tr. : He said a mouse and it lives in where?
- 111 Chn : Hole
- 112 Tr. : Hole, hole. * who can tell me? Nuhu.
- 113 Chd. : Sometimes they live***
- 110 Tr. : Alfred
- 114 Chd. : House
- 115 Tr. : House, anywhere in the house. Good
- 116 Chd. : Akura?
- 117 Tr. : Eh! Akura! Don't you know akura?
- 118 Chn : Mouse
- 119 Tr. : Yeboah where in our homes can we find mice?
- 120 Chd. : A cupboard
- 121 Tr. : You can find it in a cupboard or?
- 122 Chd. : Room
- 123 Tr. : In our rooms. Sometimes they live with us when you make your place wɔ nyae. You put this one here that one there. Then you see that the mice will come there. One day you will find it there. Right so we have this mouse. Sometimes it lives in a hole sometimes it lives where?
- 124 Chn : In our rooms
- 125 Tr. : In our rooms, kitchen cupboards and sometimes it will come into school cupboards too. Right any other example?
- 126 Chd. : Cat lives in home
- 127 Tr. : Again
- 128 Chn : Cat lives in home
- 129 Tr. : Cat lives in our homes. Who has got a cat in the home?
- 130 Chn : [Chn raise their hands]
- 131 Tr. : Very good. So we will know that cats live in our homes. What other animal live with us? In our homes. K.
- 132 K : A dog
- 133 Tr. : A dog
- 134 Chd. : A sheep
- 135 Tr. : A sheep. Yes they live in the home but they have their own special house prepared for them. Yes the last one

- 136 Chd. : A spider lives in a web
 137 Tr. : A spider lives in a web
 138 Chn : Web
 139 Tr. : Web. All of you
 140 Chn : Web
 141 Tr. : Web **ne Twi ye kano sen?** Web. Yes
 142 Chd. : **Ntintan**
 143 Tr. : **Ntintan. Na den aboa nso na yefre no spider?**
 144 Chn : [Many children raise their hands]
 145 Tr. : Ah well so you know it. Helena **eye den aboa?**
 146 Chd. : Ape
 147 Tr. : Ape. Eh! Spider? A spider **ye den aboa?**
 148 Chd. : **Ananse**
 149 Tr. : **Yoo mu fre no sen? Ananse me boa?**
 150 Chn : **Aa ne**
 151 Tr. : Yes **ananse** is a spider. Any question. Any question?
 152 Chn : No Miss
 153 Tr. : We have to do a very simple exercise on this next week if God permits. We are going to learn this particular topic again. Is that okay?
 154 Chn : Yes Miss
 155 Tr. : If there is no question then you take your science notebooks and do this exercise*****[Writes some words on the bb]
 156 Chn : [take out their exercise books and watch]
 157 Tr. : Complete this table. This column is the name of the animal. At this place I have left some blank. You write where the animal live. Where does it live? Write it here. Choose from the following answers****
 158 Chn : [Watch]
 159 Tr. : [Writes 'water, in tress, web, holes or house']
 160 Chn : [read from the bb] Complete this table. Animals. Where does it live.
 161 Tr. : Yes animals and where they live. So you write the name of the home of the animal against each animal in the table. One mouse, two fish, three birds four spider, five crocodile. Any question? Any question? Okay start work

12 - 2 - 96

65 ~~Spring~~ STATE EXP. PRIM. FIVEENGLISH - READING COMPREH.KEY WORDS

secondary school
kitchen garden
wooden box
germinated
rice & land
harvesting

Tr. introduced the lesson
by reminding chn.
that the previous
week the learnt
lesson 11 and that
today they are
just going to learn

Lesson 12.

Next he went through the key words
he had written on the bb with chn
first listening and later following
his reading.

Then he called individual chn
to read the key words on the
bb.

While ~~to~~ one child was reading

others who laughed at their effort
were condemned by saying that they
also read the word as chicken and not
Kitchen.

Chn were not asked to use the key
words in sentences. While there was
going on some chn in very low
voices were explaining the meaning
to their colleagues in Isi.

I hear a big wooden box of 10ms.

Laughter followed this sentence.

Tr. went through the words and
with organ.

Next he instructed Chn to
take their English books

The next called on individual
chm. to read aloud.

Chm. read fluently. Surprisingly
the chm are silent after one
has been called for not paying
their attention.

Next in asked pupils to read
silently. ~~He~~ He also instructed
that they will be followed by
questions.

40 read up books as against 65 pupils.
Most chm do the silent reading
rather read aloud to themselves and
those who paired actually did
pair reading. 3

Although to continue to issue
instruction to chm to read silently the
order of the day was paired and
shared reading.

Three chm actually combined reading
writing out the answers to the
reading comprehension questions
appended to the passage.

Most chm were actually using their
fingers to follow the reading.
After 5 minutes of reading
silently to stopped the pupils
and asked them questions.
In motivation still was
basically through the use of
clapping. 4

To the question 5 to the rule
of Mr. Appiah's class one child
said they were 4 but then
disputed it and the T asked them
to list the names to establish the
game ..

The teacher then to speak louder,
He T asked: What did Mr. Appiah
find in the garden
Each correct answer was followed by
a clapping.

T asked for a summary of
the text read.

One pupil said:- All we have
read is about how to make a
favour.

Next T ask pupils to read

again silently and do the exercise into
their comprehension exercise books. He then
instructed the distribution of the
comprehension exercise books.

~~Then~~ T asked class to work
exp on page 50 - Nos 1-6

P5 (12-3-96)

SCIENCE

Tr starts by asking Chr to stand.

To briefly revised liquids.

Tr introduces the new topic "Water".

Tr code switches to GL and asks the same question about water.

Tr asks Chr to smell water and tell its scent.

Next she asked for names of water.

Trs questioning skills and explanations does not give a good picture of what she wants.

Trs qts are not precise for qts are good in English but the translations are not effective.

Although Tr code switches from English to Tr her use of the Ghanaian language "Tr" is not effective.

Pupils reaction to questioning is Tr which they understood is effective and correct. Chr are also lively and cheerful when they get an understandable question.

Ghanaian language then is English. In questioning is English seem to scare the pupils. They look unsure and confused and are not eager to answer as they are when Tr is Ghanaian Language.

Tr writes summary on the board.

Water is used for drinking, washing, farming & cooking.

The pupils are usually quiet and silent when Tr asks in English. But this is not the case with those in Ghanaian language.

Tr asks Chr to take their exercise books. Next, she writes the summary on the board and asks Chr to copy.

Tr goes round to check pupils are copying the board summary.

Tr stops the writing & calls Chr to her table to show them three types of water from three different sources: rain, well, stream, pipe water.

Chr were asked to comment on the colour of the water.

Can go back to their seat
to continue to copy lb summary

The lb Summary:-

"Water is used for cooking,
washing, scrubbing, drinking
etc.

Some source of water are
rain water, pipe water, well
water, spring water, river etc.

Properties of Water

1. Water is colourless
2. Water is tasteless
3. Odourless

Tr. next write xxx on lb
for dm.

Answer the ff qts.

1. Write two sources of water
2. What is the colour of water

P3 MATHEMATICS. 29-2-96

Lesson started with the distribution of class exercise. Next to instruct pupils to close their books. He then wrote the topics - Multiplication -

Solving Equations.

Next to solve an example with pupils contribution. Pupils heavily rely on the use of calculators - giving them mathematical problems.

Six other examples were worked with class before to give 20 sec for all class to work individually and orally.

$$\begin{aligned} 8 \times y &= 40 \text{ Find } y \\ 7 \times y &= 49 \text{ What is the value of } y \\ y \times 9 &= 27. \end{aligned}$$

To read rest of part of the examples and ask class to work them back into their books.

The machine had to be paused for the teacher to rush to the H/T office for check.

To ask class to work all six examples.

Teacher goes round to check pupils work. He stops the class and give

instructions on his observation. He also gives comment as he goes round.

Interupted by pupils from other classes to collect money from their brothers & sisters. Others came to give money to the brothers & sisters.

Observation & Comment

32 class.

Although the sums had all been worked on the board with class before they were partly rubbed off for class to re-work, in the 10 minutes only 4 pupils had been able to really re-work 4 sums. Most class were simply re-copying what was on the board.

Most class did not know their multiplication tables and ~~also~~ relied heavily on the use of calculators.

Of the 32 class I had no furniture for themselves.

$$1ch = 2.$$

P5. Ghanaian Language

Tr wrote subject, on the 1st then explained the study was on Tr and asked for Chm to say their names. This was followed by explaining that the topic to be dealt with is Honors (Edin). She next asked Chm to explain the essence and meaning of names. Next she wrote "Edin (Honors)" on the 1st.

Chm gave various explanations of what names (Edin) are. Next Tr wrote a

1st summary of an explanation of words in Tr:

Edin ne asen be a ye de nye nneema bi agyime, Sebia Ompa, Otarime, asase, (sun) Owar, nso.

Next she explained two types of names. Edinpa ne din huna. (Proper & Common) Then she wrote on the 1st "Edin gi awo meien Ompa ne din huna."

Next she moved to discuss Din Pa (Proper Name) First she dealt with names of persons and made a distinction between common names and proper names. Next she moved to names of places. Here he discussed names of towns and special places.

Next she went to the 1st to write a summary in Tr: Edinpa ne Edin ye de ma onipa ana ade tiri, Sebia Booleye Kwaleye, Kumsa, Nso Parks, Prampene, etc.

Next she wrote the full heading: Din Huna (Common Name) Then she asked Chm to explain common names. After one example from the 1st Tr went ahead to give her own version of Din Huna. (3)

Then she wrote the summary
on the bb.

Din huan ye din ye de
ma nneema ukorekore
de nye hon agyirae.

Sebi's output, there
Ohemaa, Kofi, Afia
gyafa. ne ade.

Next she again explained

Din huan.

Tr next ask qts. on topic
discussed.

This was followed by exp
on the bb.

Sesran Din Pa Ewa arem
yimre (Underline the proper nouns)

1. Obaa Serwah ko faakuu ho

2. Me ko Kumare ada

3. Boedeye ye me nua

~~4. Nye~~

Tr leaves class and

chm alle themselves qtr.

Tr comes in and re

chula after her if they
have to copy the bb.
summary of the lesson
and she replied they have
to copy all

Tr. continues with the
wrty of exp for ch
on the bb.

fr Hsu Pa na da Krom mu h

S- Ma Papa din de Kofi
Mkumach.

Next Tr. read through
the exp and explained
what ch should do.

(5)

Appendix 18: Problems of Audio Tape Recording.

The use of research participants as research assistants, whether they volunteered or you assigned them to such roles requires great care. During my pilot work the research respondents agreed to assist me with the operation of the cassette audio recorder and they did it very well. However, during the main study it cost me a lot of observations and I had to go back and repeat the entire process.

During the piloting stage the teachers in my pilot group agreed to operate the portable radio cassette recorder. This was to minimise the possible effect of my presence and to avoid my obstructing and attracting the pupils' attention. The teachers, using the tape cassette recorder's strap, hang the recorder to their left wrist and took it closer to the pupils any time they had a turn. This they did very well during the pilot stage. No problems present themselves.

However, during the main data collection stage the teachers discovered they could edit the lessons simply by pressing the recorder's pause button that was closer to their left thumb. In that way they edited the recordings. By the time I discovered it, it had cost me a whole schools' recording and I had to go back and start afresh.

To overcome this problem I resorted to the use of two tape recorders. The teacher used the portable recorder strapped to his or her wrist. In addition I used another portable highly sensitive to sound on the teacher's table. I pretended to be listening to those already recorded through the help of ear phones. However I did not plug the ear phones firmly to disrupt the recording of the new lesson in progress. At the same time I listened to what was going on and took field notes. This way also helped me avoid the teachers' edited lessons.

Technical know-how and Equipment

It is often helpful to have some technical knowledge to deal with minor mechanical problems associated with the equipment you are using or intend to use. It is also advisable to have spare equipment to use when you run into unexpected problems.

If you do any form of recording (audio or visual), always play back to ensure proper recording has been done. Never wait till the end. Where it is not possible to play back immediately, ensure that you play back before the next recording takes place.

One of the teachers in my study, during a science lesson on the topic 'air exerts pressure', placed the mini portable recorder on a desk closer to a basin of water. He warned the children to be careful not to stumble and knock down the recorder. However, before he could even complete the caution, someone had pushed the other from behind and the chain reaction soon got to the table with the water basin and the recorder. Although, I was close enough to save the recorder from crashing to the ground and possibly breaking into pieces, I could not save it from the splash of water.

I took it, dried it very quickly and gave it a quick trial to check if it had been affected. It worked and I gave a deep sigh of relief. This was temporary. I was to weep later. After the day's work, I sat to play back and do some transcription but discovered that all recordings after the accident were in chunks.